

Facilities Engineering

Facilities Engineering Reports

**Headquarters
Department of the Army
Washington, DC
30 September 1987**

Unclassified

SUMMARY of CHANGE

AR 420-16

Facilities Engineering Reports

This revision--

- o Changes the reporting instructions of the Army's real property maintenance activities (chap 1).
- o Updates and simplifies the forms and instructions for preparing and submitting the Unconstrained Requirements Report (chap 2).
- o Updates the recurring maintenance factors (para 2-12).
- o Updates and simplifies the forms and instructions for preparing and submitting the Direct Backlog Status Report (chap 3).
- o Updates and simplifies the forms and instructions for the Technical Data Feeder Report (chap 4).

Effective 1 October 1987

Facilities Engineering

Facilities Engineering Reports

By Order of the Secretary of the Army:

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Official:

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The Adjutant General

History. This UPDATE printing publishes a revision which is effective 1 October 1987. Because the structure of the entire revised text has been reorganized, no attempt has been made to highlight changes from the earlier regulation dated 15 July 1983. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This regulation updates and simplifies the forms and instructions for preparing and submitting the Unconstrained Requirements Report, the Direct Backlog Status Report, and the Technical Data Feeder

Report. (Reference DID Code DI-L-1415B, OMB approval number 0704-0188, Expiration Date: 30 June 89.)

Applicability. This regulation applies to the Active Army and the U.S. Army Reserve, including Government-owned contractor-operated installations. It does not apply to the Army National Guard.

Proponent and exception authority. Not applicable.

Impact on New Manning System. This regulation does not contain information that affects the New Manning System.

Army management control process. This regulation is subject to the requirements of AR 11-2. It contains internal control provisions but does not contain checklists for conducting internal control reviews. These checklists are contained in DA Circular 11-86-3.

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from HQDA (DAEN-ZCP-B), WASH DC 20310-2600.

Interim changes. Interim changes to this regulation are not official unless they are authenticated by The Adjutant General. Users

will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. The proponent agency of this regulation is the Office of the Chief of Engineers. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQDA (DAEN-ZCP-B), WASH DC 20310-2600.

Distribution. Distribution of this publication is made in accordance with DA Form 12-9A-R requirements for 420 series publications. The number of copies distributed to a given subscriber is the number of copies requested in Block 356 of the subscriber's DA Form 12-9A-R. AR 420-16 distribution is C for the Active Army, None for the ARNG, and C for the USAR. Existing account quantities will be adjusted and new account quantities will be established upon receipt of a signed DA Form 12-9U-R (Subscription for Army UPDATE Publications Requirements) from the publications account holder.

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*This regulation supersedes AR 420-16, 15 July 1983, and rescinds DA Form 4223-2-R, Jul 83 (RCS ENG-304).

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Glossary

Chapter 1 Introduction

1-1. Purpose

This regulation sets forth responsibilities and procedures for preparing facilities engineering reports dealing with real property maintenance activities (RPMA).

1-2. References

Required and related publications and prescribed forms are listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

Table 1-2
Reports calendar

Chapter	Report title	Period covered	Due date at HQDA
2	Unconstrained Requirements Report	1 Oct-30 Sep	15 Jan
3	Direct Backlog Status Report		
	a. Quarterly direct BMAR obligations component	1 Oct-31 Dec	4 Feb
		1 Oct-31 Mar	4 May
		1 Oct-30 Jun	4 Aug
		1 Oct-30 Sep	4 Nov
	b. FY direct unfinanced BMAR component	1 Oct-30 Sep	4 Nov
	c. FY summary analysis of direct backlog changes component	1 Oct-30 Sep	4 Nov
	d. FY direct AFH DMAR component	1 Oct-30 Sep	4 Nov
4	Technical Data Feeder Report	1 Oct-30 Sep	30 Nov

1-4. Responsibilities

- a. The Chief of Engineers will—
 - (1) Establish facilities engineering reports policies, procedures, and forms.
 - (2) Consolidate RPMA and housing statistical data received from major Army commands (MACOMs), except as noted in *b* and *c* below.
 - (3) Prepare, publish, and distribute the Facilities Engineering and Housing Annual Summary of Operations.
- b. The Chief, Army Reserve will consolidate, or arrange for the consolidation of the following reports as they apply to Operation and Maintenance, Army Reserve (OMAR):
 - (1) Unconstrained Requirements Report.
 - (2) Direct Backlog Status Report.
- c. The Assistant Secretary of the Army (Research, Development and Acquisition) will consolidate, or arrange for the consolidation of the following reports as they apply to research, development, test, and evaluation (RDTE):
 - (1) Unconstrained Requirements Report.
 - (2) Direct Backlog Status Report.
- d. The Commanding Generals of MACOMs will—

- (1) Review and evaluate reports received from Army installations under their jurisdiction.
- (2) Prepare consolidated reports.
- (3) Furnish installation and consolidated reports to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, by required due dates.
- (4) Ensure that internal controls are in place and executed as required.
- e. Installation Directors of Engineering and Housing (DEH) will—
 - (1) Prepare the facilities engineering reports.
 - (2) Submit reports by their required due dates.
- f. Engineer personnel at each level of command will review reports to ensure—
 - (1) Data are factual and correct.
 - (2) An analysis is made of the data, and comparisons are made with prior year data to determine whether plus or minus changes are reasonable.
 - (3) Research is made of unusually low or high unit costs and other out-of-line situations (for example, plus or minus 5 percent changes in square feet from year to year).

1-5. Report preparation methods

a. Installations that do not provide input data to the Headquarters, Integrated Facilities System data base will prepare reports manually.

b. The Technical Data Feeder Report will be prepared by automatic data processing methods if the following conditions have been met:

(1) Prior to submission in automated mode, coordination with the Facilities Engineering Support Agency (FESA) will be accomplished. Communications should be sent to the Commander, U.S. Army Facilities Engineering Support Agency, ATTN: FESA-SQ, Fort Belvoir, VA 22060-5516.

(2) The procedures and formats in the Integrated Facilities System User's Manual are followed.

1-6. Army maintenance and repair (M&R) policy

a. Projects having an impact on the quality of life of the soldier and unit readiness must be given the highest priority for accomplishment.

b. The following facilities categories are listed in priority sequence:

- (1) Operational facilities.
- (2) Housing and dining facilities.
- (3) Critical utilities systems.
- (4) Medical facilities.
- (5) Maintenance shops.
- (6) Community facilities at remote sites.
- (7) All other.

c. Variations from the priority sequence in *b* above may occur when the MACOM commander has determined the existence of and approved overriding factors that require a deviation.

1-7. Management of Army real property

a. Effective management of Army real property, particularly M&R, requires planning and programming of RPMA resources.

b. Planning and programming for RPMA resources will support program proposals and budget requests needed to attain specific Army objectives.

c. Army installations and activities are required to report on progress in the use of resources. The reports form one element of a system to evaluate RPMA management. Other elements of this process include—

- (1) Observations by Army Staff members when on liaison visits.
- (2) Analysis of such factors as the backlog of maintenance and repair (BMAR) as compared to estimates shown in the plans.
- d. Evaluation of reports will be done at all command levels.

1-8. Contractor-operated installations

AR 5-20 covers the process of determining whether installation activities will be performed by Government personnel or by commercial contractors, including Government-owned contractor-operated (GOCO). The requirements of AR 420-16 must be satisfied whether activities are performed in-house or by contractors. The MACOM/installation is responsible for ensuring that the contract provisions include the method of submitting adequate, accurate, and timely data. This is consistent with the direction provided by the Department of the Army in its guidance regarding commercial activities.

1-9. Unit of measure prefixes

The unit prefixes listed in table 1-1 are among those adopted by the International Committee on Weights and Measures.

Table 1-1
Unit codes, prefixes, and definitions

Code	Prefix	Definition
T	Tera	10 (12th power) (trillion)
G	Giga	10 (9th power) (billion)
M	Mega	10 (6th power) (million)
K	Kilo	10 (3rd power) (thousand)
H	hecto	10 (2nd power) (hundred)

Table 1-1
Unit codes, prefixes, and definitions—Continued

Code	Prefix	Definition
Da	deka	10 (ten)

1-10. Report submission dates

The submission dates for the reports in this regulation are shown in table 1-2.

Chapter 2

Unconstrained Requirements Report (RCS 0704-0188)

2-1. Unconstrained Requirements Report (DA Form 4223-R)

a. The Unconstrained Requirements Report (URR) will be prepared on DA Form 4223-R. DA Form 4223-R will be reproduced locally on 8½- by 11-inch paper. A copy for local reproduction purposes is at the back of this regulation.

b. Separate URRs will be submitted for the following appropriations and funds: Operation and Maintenance, Army (OMA), Operation and Maintenance, Army Reserve (OMAR), Research, Development, Test and Evaluation (RDTE), Other Procurement, Army (OPA), and Army Family Housing (AFH).

2-2. Applicability

This chapter does not apply to the following:

- a. Installations or activities located in officially designated combat zones or civil functions under control of the Secretary of the Army.
- b. Communications activities not included in AR 37-100-XX.
- c. National Guard elements.

2-3. Purpose of the URR

The URR is a program document designed to disclose the total unconstrained requirements needed to operate and maintain the Army's real property investment worldwide.

a. URR information is used to—

- (1) Develop Army-wide, MACOM, installation, community, and activity RPMA requirements.
- (2) Present Army-wide RPMA requirements during the planning phase of the planning, programming, budgeting, execution, and review system cycle. Unconstrained Army planning requirements are developed during the planning phase.
- (3) Develop the initial phases of the Army Program Objective Memorandum.
- (4) Develop RPMA budget requests, including exhibits and tables.
- (5) Allocate to MACOMs funds that are, in turn, redistributed to installations, communities, and activities.
- (6) Manage the Army's RPMA program.
- (7) Develop and revise policies, programs, and standards.
- (8) Report to other authorities such as Department of Defense (DOD), Office of Management and Budget (OMB), and the Congress.

(9) Respond to various requests for information received during the fiscal year without the need to canvass MACOMs to furnish such information on a case-by-case basis.

b. The integrated planning, programming, and budgeting system assists in devising and conducting the overall RPMA program by bringing the following together:

- (1) Annual and long-range work plans that are validated by engineer elements and accurately show unconstrained requirements.
- (2) Annual submission of reports in support of Army budget requests.

- (3) Uniform systems for—
 - (a) Cost accounts in programming, budgeting, accounting, reporting, and evaluating the RPMA program.
 - (b) Cost accounting standards for reporting on RPMA.

2-4. Preparation of DA Form 4223-R

When preparing the report, follow the instructions that appear in front of DA Form 4223-R.

2-5. Report due dates

MACOMs will—

- a. Establish report due dates and other instructions for installations, communities, and activities under their jurisdiction to ensure timely submission of reports.
- b. Combine feeder data reports submitted by their installations, communities, and activities.
- c. Prepare a separate consolidated report for each appropriation and fund covering the budget year, budget year plus 1, and budget year plus 2. Under the new multi-year budgeting arrangement, the budget year covers two fiscal years which are to be separately reported; for example, two separate reports are to be prepared covering Fiscal Years 1990 and 1991. The budget year plus 1 would cover Fiscal Year 1992, and the budget year plus 2 would cover Fiscal Year 1993.
- d. Send three copies of each consolidated report to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, so as to arrive not later than 15 January each year.

2-6. Annual recurring requirements

a. Annual recurring requirements (ARR) represent the level of operations, M&R, and services needed to sustain occupant activities, prevent avoidable deterioration of the physical plant, and preserve real property in accordance with established engineering standards while adequately supporting assigned missions. ARR can be accomplished by either the in-house work force or by contract.

b. Specific guidance that governs the determination of ARR by functional accounts is outlined below.

(1) *Operation of utilities.* The ARR for utilities is that level of utility support needed to sustain all activities consistent with norms for geographic areas, activities serviced, and composition of the physical plant. The program will be developed to meet conservation goals considering good engineering practice for plant operations and will incorporate benefits resulting from the investment made to improve economy and efficiency of utility plants and systems. The key to a properly developed ARR is accurate workload based on good engineering practices for plant operations and on reliable utilities consumption estimates. Historical precedence may assist in developing utilities consumption. Current estimates of unit costs will be used in developing costs.

(2) *Maintenance and repair* The ARR for M&R is the extent of work (excluding BMAR projects) that needs to be done during a given fiscal year to keep facilities in serviceable condition in accordance with maintenance standards and to prevent premature deterioration of the physical plant. To allow for unforeseen emergencies and urgent repairs, new projects may be added during the year. ARR consists of scheduled work such as painting and roofing; minor repairs such as fixing electrical outlets, plumbing fixtures, or air conditioning units; preventive maintenance; and cyclical maintenance such as cleaning boilers and heating systems, grass cutting, or tree pruning. These jobs can be done in-house or by contract, but should be done by the most economical method. Recurring maintenance factors will be developed based on quantified data and equitable treatment of comparable facilities. Program development for fiscal years will be preceded by an analysis of exceptionally high installation costs as compared to other installations for comparable functional accounts.

(3) *Minor construction* The ARR for minor construction is the total planned new work to be accomplished. Funding guidance limits new work obligations to 10 percent of the sum of the ARR for M&R (K Account) plus the minor construction (L Account). It

can be exceeded where Army initiatives are included (for example, force modernization, force structure changes, force protection, and energy conservation projects). The program represents the degree of minor construction needed to be funded with operation and maintenance (O&M) resources. Minor construction not accomplished by year end does not qualify as backlog of maintenance and repair (BMAR).

(4) *Engineer support* ARR for engineer support is the level of support authorized by regulations and justified in accordance with workload and identifiable circumstances that substantiate the degree of support programmed. The key to a properly developed ARR is the output (custodial service per square foot, cubic yards of refuse collected, and so forth) versus the most economic costs.

2-7. One-time requirements

a. One-time requirements are those additional requirements not covered by ARR. Each such requirement would have a beginning and ending date. Most one-time requirements would be completed within 1 or 2 fiscal years. Upon completion, they would become either part of ARR or would be dropped.

b. Examples of one-time requirements are shown below.

(1) Changes in mission, programs, and operational needs.

(2) A division may be transferred to your installation or community. This may necessitate the opening of additional barracks, causing increases in utility, maintenance, custodial, and refuse collection services. Depending on the timing of the transfer, this may be completed within 1 or 2 fiscal years. Thereafter, any increased costs would become part of ARR.

(3) Five percent of the roofs are planned for replacement each year. The damage from weather is so severe that it becomes necessary during a given fiscal year to replace 15 percent of the roofs. Under such a circumstance, 5 percent of the dollars are ARR, and 10 percent are one-time requirements. Other examples include excessive damage to pipes caused by acts of nature, and barracks severely damaged.

(4) Higher authority has directed special studies/surveys be conducted by a given timeframe. Efforts require contractual support services. Additional one-time resources in support thereof would need to be programmed.

2-8. Backlog of maintenance and repair

a. BMAR is a fiscal yearend measurement of M&R of real property (not equipment) work that remains as a firm requirement and was not started during the fiscal year due to a lack of resources. To be eligible for consideration as BMAR, real property M&R work requirements must have been included on an approved annual work plan that includes unfunded requirements. (See DA Pam 420-6, chap 3, for guidance on this annual work plan.) When BMAR is started by in-house personnel, or contract funds are obligated for the work, this is considered to be work in process and is no longer BMAR.

b. BMAR provides only for the M&R of real property work needed to restore failed (deteriorated) or failing (deteriorating) facilities or components to an operative condition, or to a state that prevents further deterioration. BMAR consists of work chargeable only to the M&R of real property account.

c. The following categories are not eligible BMAR, except as otherwise noted:

(1) M&R of real property requirements not included on an approved annual work plan and not reflected on a URR.

(2) M&R of real property requirements included on an approved annual work plan and reflected on a URR when work has been started either by in-house personnel or contract funds have been obligated.

(3) Projects with an estimated cost of less than \$10,000. (This assumes that ARR will be adequate to routinely fund such projects.)

(4) Preventive maintenance projects and tasks.

(5) Real property inspection and review projects and tasks. However, deficiencies that are converted into M&R of real property requirements included on an approved annual work plan and URR, after design and cost estimates are developed, qualify as BMAR.

- (6) M&R of real property scheduled for demolition.
- (7) M&R of real property requirements financed by foreign governments.
- (8) Repetitive maintenance requirements normally accomplished through issuance of repetitive maintenance requirements orders.
- (9) Recurring work requirements such as filter changes, storm drains, or work done by service contract such as elevator maintenance and floor sanding.
- (10) Scheduled maintenance requirements. However, scheduled maintenance requirements repeated at long intervals—years rather than months—that are unfinanced at the end of the fiscal year qualify as BMAR. Examples include surface treatment of pavements, scheduled painting, and cleaning the interiors of water mains.
- (11) Projects covering replacement of a functioning component of a facility regardless of age.
- (12) Work identified as construction or alteration under AR 415–35 or other work not associated with restoring deteriorated facilities.
- (13) Projects involving addition of a component not previously a part of the structure.
- (14) Real property facility modernization projects. However, associated M&R that normally would have been done if modernization programs had not been implemented does qualify as BMAR.

2–9. Manageable BMAR level

a. Manageable BMAR level is designed to prevent continued deterioration of real property. A manageable BMAR level consists primarily of those lower priority BMAR projects whose deferral due to insufficient funds is economically justifiable and does not impact significantly on mission or morale. In addition, the manageable BMAR level often includes BMAR projects logically deferred for reasons such as pending stationing or mission change decisions, possible future funding through other programs, or the need for project accomplishment simultaneously with or subsequent to other related work. Deferred projects are still required to bring facilities up to an acceptable level to meet their intended purposes. Each

MACOM should carefully weight the acceptable level of criticality below which requirements may be deferred.

b. To arrive at an appropriate manageable BMAR level, a MACOM requires a suitable system to—

- (1) Score and rank valid BMAR projects in priority order to reflect their degree of need and the resources impact. Scoring is usually accomplished through a weighted average process.
- (2) Determine the priority score below which BMAR projects will be deferred.

2–10. Deferred maintenance and repair (DMAR)

DMAR is related to family housing only. DMAR is synonymous with BMAR described in paragraph 2–8.

2–11. MACOM variance explanations

a. Each MACOM will include a narrative explanation when its consolidated report data exceeds the variances described below. Such explanations will enable a more adequate and timely response to questions raised by officials in Army, DOD, OMB, and the Congress, as well as by the U.S. Army Audit Agency, the Congressional Budget Office, and the U.S. General Accounting Office (GAO).

(1) *Maintenance and repair of real property and engineer support*

(a) Each fiscal year variance that exceeds plus or minus 3 percent at the fiscal year total dollar requirements level (column g of DA Form 4223–R) will be briefly but clearly explained by the MACOM.

(b) Upon preparing a consolidated report covering, for example, fiscal years 1989, 1990, and 1991, a total dollar comparison needs to be made by the MACOM of each of those 3 fiscal years, plus fiscal year 1988 of the prior year's report, as illustrated in figure 2–1. The plus 4.0 percent variance needs to be briefly but clearly explained by the MACOM.

Table 2–1
Example of M&R and engineer support variances

Fiscal Year	1988	1989	1990	1991
Total & (millions)	\$170	\$174	\$181	\$176
\$ Variance	—	+\$4	+\$7	–\$5
% Variance	—	+2.4%	+4.0%	–2.8%

(2) *Operation of utilities.*

(a) Executive Order 12003 directed all Federal activities to reduce energy consumption in facilities by 20 percent between fiscal years 1975 and 1985 on a British Thermal Unit (BTU) per square foot basis. About 83 percent of the Army's energy is consumed in support of facilities. The Army reduced facilities energy used during this 10-year period by about 22 percent.

(b) New 10-year reduction goals have been established. In furtherance of the new goals, any dollar increase at the consolidated

fiscal year total dollar requirements level (column g of DA Form 4223–R) must be briefly but clearly explained by the MACOM.

(c) Upon preparing a consolidated report covering, for example, fiscal years 1989, 1990, and 1991, a total dollar comparison needs to be made by the MACOM of each of those 3 fiscal years, plus fiscal year 1988 of the prior year's report. An example of this comparison is shown at figure 2–2. The plus \$2 million increase needs to be briefly but clearly explained by the MACOM.

Table 2–2
Example of operations of utilities variances

Fiscal Year	1988	1989	1990	1991
Total & (millions)	\$93	\$93	\$92	\$94
\$ Variance	—	—	–\$1	+\$2

(3) *Minor construction.*

(a) In accordance with funding guidance, the consolidated total dollar requirements of minor construction may not exceed 10 percent of the dollar sum of M&R of real property and minor construction. It can be exceeded where Army initiatives are involved (for

example, force modernization, force structure, force protection, and energy construction projects).

(b) Comparisons for fiscal years 1989, 1990, and 1991 are shown in figure 2–3. The 11.9 percent needs to be briefly but clearly explained by the MACOM.

Table 2-3
Example of minor construction variances

Fiscal Year	1989	1990	1991
Total M&R & minor construction (million \$)	\$120	\$122	\$126
Minor construction (million \$)	\$11	\$12	\$15
% of total	9.2%	9.8%	11.9%

b. MACOMs may request supplemental information and data from the installations, communities, and activities under their jurisdiction for internal management purposes.

2-12. Recurring maintenance factors (RMFs)

a. Constant dollar factors should be used to calculate recurring maintenance requirements. No attempt should be made to estimate potential inflationary impacts. The factors should follow the guidance provided in Command Operating Budget instructions.

b. Recurring maintenance factors are listed in table 2-1. These RMFs—

(1) May be used to calculate recurring maintenance and repair requirements for the current and program years. These factors may be adjusted to account for differences in the availability and cost of labor in each geographical area. AR 415-17 will be used to adjust the standard RMFs in table 2-1.

(2) Indicate the amount estimated to be required to repair and maintain facilities for a fiscal year. To estimate fiscal year funds needed by an installation, multiply the applicable RMF by the annual quantity of the unit measure.

(3) Are based on fiscal year 1980-1986 data. RMFs are expressed in dollars per unit of measure. For example, 2314.11 for an FGC in K square feet means 2314.11/1000 square feet equals 2.31 per square foot.

(4) Can be used as stated in developing the URR. However, users of these factors are encouraged to develop local RMFs that are relevant to their operation.

2-13. Report accuracy

a. RPMA reporting will be compatible and reconcilable to summary level information contained in other applicable resource and management information systems.

b. Feeder and consolidated reports will be carefully reviewed before submission to ensure accuracy. Accurate information is essential to enhance planning, programming, budgetary, and allocation decisions.

Chapter 3

Direct Backlog Status Report (RCS 0704-0188)

3-1. Direct Backlog Status Report (DA Form 4954-R)

a. The DA Form 4954-R (Direct Backlog Status Report) is the primary source of information used to inform officials in the Army, DOD, OMB, the Congress, and the GAO of the progress being made in containing backlogs.

b. DA Form 4954-R will be reproduced locally on 8½- by 11-inch paper. A copy for local reproduction purposes is at the back of this regulation.

c. See paragraphs 2-8, 2-9, and 2-10 for descriptions of BMAR, manageable BMAR level, and DMAR that must be considered in preparing this report.

d. Guides in AR 415-28 will be reviewed in preparing this report.

3-2. Preparation of DA Form 4954-R

a. DA Form 4954-R is a multiple use form designed for progressively preparing the following four related components of the Direct Backlog Status Report:

- (1) Quarterly Direct BMAR Obligations.
- (2) FY Direct Unfinanced BMAR.
- (3) FY Summary Analysis of Direct Backlog Changes.
- (4) FY Direct Unfinanced AFH DMAR.

b. When preparing the report, follow the instructions that appear in front of DA Form 4954-R.

3-3. Installation, community, and activity due dates

MACOMs will—

a. Establish report due dates and other instructions for installations, communities, and activities under their jurisdiction.

b. Combine the feeder data submitted by their installations, communities, and activities.

c. Prepare a separate consolidated report for each appropriation and fund.

d. Carefully review feeder and consolidated reports before submission to ensure accuracy.

3-4. MACOM quarterly direct BMAR obligations component due dates

MACOMs will send two copies of each consolidated quarterly direct BMAR obligations component to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, so as to arrive by the due dates indicated in table 3-1. Each quarterly component will progressively contain the cumulative BMAR fiscal year obligations.

Table 3-1
Schedule for consolidated quarterly direct BMAR obligations submissions

Quarter ending date	Cumulative obligations	Due at HQDA
31 Dec	1 Oct - 31 Dec	4 Feb
31 Mar	1 Oct - 31 Mar	4 May
30 June	1 Oct - 30 June	4 Aug
30 Sep	1 Oct - 30 Sep	4 Nov

3-5. MACOM fiscal year component due date

a. MACOMs will send two copies of the following fiscal year

consolidated components to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, so as to arrive no later than 4 November:

- (1) FY Direct Unfinanced BMAR.

- (2) FY Summary Analysis of Direct Backlog Changes.
- (3) FY Direct Unfinanced AFH DMAR.

b. When any BMAR appropriation or fund is less than \$25,000 (line 8, component C of DA Form 4954-R), submit a letter listing each applicable appropriation and fund and the total amount involved in lieu of preparing component B, FY Direct Unfinanced BMAR.

Chapter 4

Technical Data Feeder Report (RCS 0704-0188)

4-1. Technical Data Feeder Report (DA Form 2788-R)

a. The Technical Data Feeder Report (TDFR) will be prepared on DA Form 2788-R. DA Form 2788-R will be reproduced locally on 8½- by 11-inch paper. A copy for local reproduction purposes is located at the back of this regulation.

b. See paragraphs 2-8, 2-9, and 2-10 for descriptions of BMAR, manageable BMAR level, and DMAR that must be considered in preparing this report.

4-2. Applicability

a. This report applies to the Active Army and the U.S. Army Reserve. It includes installations and communities operating under a lease either to or from DA.

b. This report does not apply to the following:

- (1) Elements of the Army National Guard.
- (2) Reserve industrial facilities leased or permitted to a private corporation.

4-3. Purpose of the TDFR

This report is designed to provide prior year operating costs and performance data for all RPMA work done at Army installations and communities. It facilitates in making a management and technical evaluation of the adequacy of the facilities engineering operation.

4-4. Uses

Program and operating managers make day-to-day decisions that impact RPMA workload performance and result in financial obligations and expenditures. Adequate financial control requires not only that program and operating managers keep abreast of what products and services actually cost but, also, why. Information contained in the TDFR enables tracking of program execution. It has multiple uses at different Army levels.

a. At the installation and community level, the information can be used to—

- (1) Provide cost center and product center workload productivity and operating cost information.
- (2) Evaluate whether program, productivity, and cost objectives are being met and exceeded.
- (3) Determine whether unit and overall costs are in line with expected costs.
- (4) Compare short- and long-range workload productivity and operating cost trends.
- (5) Locate outstanding areas.
- (6) Identify emerging low workload productivity and high-cost problem areas.
- (7) Initiate timely management action designed to increase workload productivity and reduce operating costs, including whether methods need to be streamlined and whether manual processes need to be replaced by automated processes.
- (8) Provide a factual basis for comparing in-house workload productivity and operating cost information against that in the private sector.
- (9) Monitor contractor performance to ensure that such performance is satisfactory and cost effective, as required by the provisions of AR 5-20.
- (10) Determine fixed facility costs on a square foot basis.

- (11) Brief installation and community commanders.
- (12) Recommend changes in policies, programs, and standards.
- b.* At the MACOM level, the information can be used to—
 - (1) Compare installation and community workload performance and operating cost trends.
 - (2) Plan and conduct cross-cutting functional studies of low workload productivity and high cost areas.
 - (3) Recommend changes in policies, programs, and standards.
- c.* At the HQDA level, the information can be used to—
 - (1) Compare MACOM, installation, and community workload performance and operating cost trends.
 - (2) Prepare the Facilities Engineering and Housing Annual Summary of Operations.
 - (3) Respond to requests received during the fiscal year.
 - (4) Develop and revise policies, programs, and standards.

4-5. Preparation and submission of DA Form 2788-R

a. Installations and communities will—

(1) Prepare DA Form 2788-R each year as of the end of the fiscal year, unless authorized by their MACOMs to provide input data directly to the Headquarters, Integrated Facilities System (IFS) data base.

(2) Prepare one consolidated report covering all appropriations and funds. The carrier appropriation or fund of the reporting activity will be shown on each page of the report, for example, OMA, AIF.

(3) Include data on RPMA type contracts or other operations not processed through the installation's carrier program reimbursable procedures. An example of this is when the family housing activity awards a contract using the AFH appropriation as a direct cite on the contract award.

(4) Send three copies of each completed report to their MACOMs in accordance with the due date and supplemental instructions issued by the MACOMs.

b. MACOMs will—

(1) Establish report due dates and other instructions for installations, communities, and activities under their jurisdiction to ensure timely submission of reports.

(2) Send two copies of each installation and community report to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, so as to arrive not later than 30 November.

c. Preparation instructions are located in front of the form.

4-6. Automated submission of data

a. Prior to initial automated submission of data, coordination with the Facilities Engineering Support Agency will be accomplished. PAXMAIL communication is the preferred method and should be sent to V3FESA. Other types of communications should be sent to the Commander, U.S. Army Facilities Engineering Support Agency, ATTN: FESA-SQ, Fort Belvoir, VA 22060-5516.

b. All parent installations and communities currently on an installation integrated facilities system (IFS) will follow the technical data submission procedures contained in the Headquarters IFS Technical Data Subsystem Student Manual.

c. Installations and communities that have IFS are directed to use the automated mode for submission of this data. It is incumbent upon each such installation and community to ensure that—

- (1) Their IFS data base is up-to-date with all costs recorded and that real property records are accurate.
- (2) Responsible personnel have been trained in the use of the IFS.

(3) There is adequate telecommunications capability.

d. All parent installations and communities on the Headquarters IFS Project Management and Prioritization Subsystem (PMAP) will automatically have their unfinanced workload information available for review and update in the Technical Data Subsystem. All other installations must enter their information interactively by updating the work projects segment of the Technical Data Subsystem.

4-7. Contractor preparation of report

a. AR 5-20 prescribes policies, procedures, and responsibilities for managing and carrying out the Commercial Activities Program.

b. MACOMs/installations will arrange to obtain at least the data specified in *d* below from GOCOs and at such other installations and communities where RPMA functions have been contracted out. MACOMs/installations should ensure that contractors submit complete, accurate, and timely reports. Contractor submissions will be in accordance with the instructions of the MACOMs/installations.

c. Contractor data may be provided either manually or by ADP input methods (tape, disk, card) compatible with system data input methods. The method of providing required data must be clearly and completely detailed in the contract. This is consistent with the direction provided by the Department of the Army in its guidance regarding commercial activities.

d. When the manual mode of submission is the Technical Data Feeder Report, a contractor will be required to complete the quantities and contract columns of part IV, Operating Costs and Performance Data, of DA Form 2788-R for each applicable line item. Only Government furnished supplies, labor, and other elements of expense will be separately identified in the supplies, labor, and other columns and lines. The applicable columns and lines of parts I, II, and III must also be completed.

e. The MACOM/installation may transmit contractor furnished data via the manual or automated mode. If the manual mode is the Technical Data Feeder Report, the installation should send three copies of each such report to its MACOM. The MACOM should send two copies of each such report to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, so as to arrive no later than 30 November.

4-8. Activity preparation of report

a. Activities that do not operate installations but obligate Operation and Maintenance, Army or Army Family Housing Management Account funds, either directly or indirectly, must include such obligations on Part II of the DA Form 2788-R.

b. Such activities need not prepare the remainder of the report unless the MACOM/installation indicates that additional data are required for internal management purposes.

c. Four copies of the report will be furnished to the installation, which will retain one copy and send three copies of each report to its MACOM. The MACOM will retain one copy and send two copies of each report to HQDA (DAEN-ZCP-B), WASH DC 20310-2600, so as to arrive not later than 30 November.

4-9. Report distribution

a. A copy of the installation volume of the Facilities Engineering and Housing Annual Summary of Operations will be furnished to the following at the installation, community, and MACOM levels:

- (1) DEH or equivalent.
- (2) Chief, Buildings and Grounds Branch or equivalent.
- (3) Chief, Utilities Branch or equivalent.

b. Installation performance data includes information that might be procurement sensitive, depending on the status of the commercial activities program at an installation. Installation performance data are detailed for each functional account. Distribution of this volume is limited to authorized DOD agencies and activities.

Appendix A References

Section I Required Publications

AR 5–20

Commercial Activities Program. (Cited in paras 1–8, 4–4, and 4–7.)

AR 37–100–XX

The Army Management Structure. (Cited in para 2–2.)

AR 415–17

Cost Estimating for Military Programs. (Cited in para 2–12.)

AR 415–28

Department of the Army Facility Classes and Construction Categories. (Cited in para 3–1.)

AR 415–35

Minor Construction, Emergency Construction, and Replacement of Facilities Damaged or Destroyed. (Cited in para 2–8.)

DA Pam 420–6

Facilities Engineering Resources Management System. (Cited in para 2–8.)

Section II Related Publications

A related publication is merely a source of information. The user does not have to read it to understand this regulation.

AR 11–27

Army Energy Program.

AR 37–108

General Accounting and Reporting for Finance and Accounting Offices.

AR 37–110

Budgeting, Accounting, Reporting, and Responsibilities for Industrial Funded Installations and Activities.

AR 420–10

Facilities Engineering: General Provisions, Organization, Functions, and Personnel.

DA Pam 210–1

U.S. Army Installations and Major Activities.

Section III Prescribed Forms

DA Form 4223–R

Unconstrained Requirements Report. (Prescribed in para 2–1.)

DA Form 4954–R

Direct Backlog Status Report. (Prescribed in para 3–1.)

DA Form 2788–R

Technical Data Feeder Report. (Prescribed in para 4–1.)

Table 2–1
Recurring Maintenance Factors

Codes FGC & AMS	Activity description	Unit of measure	Recurring Maintenance factor
84110K1	Water systems treatment and filtration plants	K gal–day	13.73
84130K1	Water systems treatment and filtration sources	Kgal–day	2.37
84470K1	Water systems wells	K gal–day	10.38
84210K1	Water systems distribution systems mains and laterals	Klin ft	392.58
84220K1	Water systems distribution systems pumping stations	Kgal–day	3.80
84230K1	Water systems distribution systems storage	Kgal–cap	8.02
83111K1	Sewer systems primary treatment plants	K gal–day	46.27
83112K1	Sewer systems secondary treatment plants	K gal–day	28.33
83113K1	Sewer systems advanced waste water treatment plants	K gal–day	11.11
83114K1	Sewer systems industrial waste treatment facilities	Kgal–day	26.32
83210K1	Sewage collection systems sanitary mains and laterals	Klin ft	449.38
83230K1	Sewage collection systems sanitary pumping plants	Kgal–day	4.83
83240K1	Sewage collection system industrial waste mainsand laterals	K lin ft	64.03
83230AK1	Sewage collection system industrial waste pumping plants	Kgal–day	6.17
81100K1	Electric systems electric generating plants	KVA cap	18.69
81241K1	Electric distribution systems—overhead	K lin ft	205.65
81242K1	Electric distribution systems—underground	K lin ft	180.31
81260K1	Electric distribution transformers	KVA cap	1.09
81230K1	Exterior lighting	No lts	38.39
81300K1	Substations and switching stations	No plts	2,024.47
82131K1	Gas–fired boiler plants over 3.5 MBTU per hourcapacity	M BTU	722.63
82121K1	Oil–fired boiler plants over 3.5 MBTU per hourcapacity	M BTU	990.50
82111K1	Coal–fired boiler plants over 3.5 MBTU per hourcapacity	M BTU	1,533.95
82132K1	Gas–fired heating plants over 3.5 MBTU per hourcapacity	M BTU	834.18
82122K1	Oil–fired heating plants over 3.5 MBTU per hourcapacity	M BTU	1,501.16
82112K1	Coal–fired heating plants .75 to 3.5 MBTU per hourcapacity	M BTU	3,369.54
82133K1	Gas–fired heating plants .75 to 3.5 MBTU per hourcapacity	M BTU	1,141.79
82123K1	Oil–fired heating plants .75 to 3.5 MBTU per hourcapacity	M BTU	2,389.74
82113K1	Coal–fired heating plants .75 to 3.5 MBTU per hourcapacity	M BTU	1,560.49
82134K1	Gas–fired heating plants under .75 MBTU per hourcapacity	M BTU	633.15
82124K1	Oil–fired heating plants under .75 MBTU per hourcapacity	M BTU	1,475.98

Table 2-1
Recurring Maintenance Factors—Continued

Codes FGC & AMS	Activity description	Unit of measure	Recurring Maintenance factor
82114K1	Coal-fired heating plants under .75 MBTU per hourcapacity	M BTU	1,051.19
82200K1	Steam and hot water distribution systems	K lin ft	2,141.61
82400K1	Gas distribution systems	K lin ft	265.47
82300K1	Gas storage and generating facilities	No facil	116.51
82611K1	Air conditioning plants—over 100 ton capacity	Ton cap	63.07
82612K1	Air conditioning plants—25–100 ton capacity	Ton cap	73.19
82613K1	Air conditioning plants—5–25 ton capacity	Ton cap	134.28
82614K1	Air conditioning plants—under 5 ton capacity	Ton cap	31.92
82621K1	Refrigeration—5 HP and over (ex cold storage plants)	HPcap	59.71
82622K1	Refrigeration—under 5 HP (Ex cold storage plants)	HPcap	76.42
43000K1	Cold storage plants—including ice manufacturing	HPcap	129.52
82631K1	Mech. vent. and evap. cooling	Units	54.84
40000AK1	Liquid storage facilities	Facil	1,822.62
88200K1	Intrusion detection systems	Systems	514.55
17100K2	Training buildings	K sq ft	719.60
21000K2	Maintenance and Production Buildings	K sq ft	902.10
20000K2	Research, development, and test buildings	Ksq ft	1,024.98
42000K2	Storage Buildings	K sq ft	251.95
51000K2	Hospital and medical buildings	K sq ft	1,438.63
60000K2	Administration buildings	K sq ft	1,386.00
72000K2	Bachelor housing buildings	K sq ft	1,243.19
73000K2	Community buildings	K sq ft	1,248.16
71000K2	Family housing buildings	K sq ft	983.05
80000K2	Utility plant buildings	K sq ft	990.01
10000K2	Other buildings—categories not otherwise assigned	Ksq ft	775.56
87500K3	Improved grounds	Acre	175.25
87610K3	Other than improved grounds	Acre	1.28
86015K4	Railroads—active—including MOB and RDF trackage	K linft	200.40
85100K5	Roads—concrete and bituminous	K sq ft	341.92
85100AK5	Roads—other miscellaneous	K sq ft	93.92
11000K5	Airfield pavements—concrete and bituminous	K sq ft	343.50
11000AK5	Airfield pavements—other miscellaneous	K sq ft	75.49
85200K5	Parking, open storage and walks—concrete and bituminous	Ksq yds	130.91
85200AK5	Parking, open storage and walks, other miscellaneous	Ksq yds	63.97
85300K5	Bridges and trestles—railroad	Lin ft	42.27
98000K8	Maintenance and repair—inactive facilities and installations	K sq ft	486.30

Glossary

Section I Abbreviations

AIF

Army Industrial Fund

ARR

annual recurring requirements

BMAR

backlog of maintenance and repair

DEH

Director of Engineering and Housing

DMAR

deferred maintenance and repair

GOCO

Government-owned contractor-operated

IFS

Integrated Facilities System

MACOM

major Army command

M&R

maintenance and repair

O&M

operation and maintenance

OMA

Operation and Maintenance, Army

OMAR

Operation and Maintenance, Army Reserve

RMF

recurring maintenance factor

RPMA

real property maintenance activities

RDTE

research, development, test, and evaluation

TDFR

Technical Data Feeder Report

URR

Unconstrained Requirements Report

Section II Terms

Backlog of maintenance and repair

A fiscal yearend measurement of M&R of real property (not equipment) work that remains as a firm requirement and was not started during the FY due to a lack of resources.

Backlog of maintenance and repair at Army industrial installations

An annual measurement at the end of each FY of that real property facilities M&R work that was required to maintain the facilities readiness (high or low), but could not be

accomplished (in this sense obligated) within funds provided during the FY.

Contractor operated

A facility operated by a GOCO or other contractor who has overall mission responsibilities.

Contractor performed functions

Functions performed by a contractor at a facility (for example, refuse handling, custodial services, pest control services).

Deferred maintenance and repair (DMAR)

A term that applies to Army family housing facilities. This term is synonymous with BMAR.

Maintenance

Work required to preserve or restore real property facilities to their operative condition. It includes work done to prevent damage to facilities that otherwise would be more costly to restore; also includes work done to sustain existing components (for example, renewal of disposal filters, painting, caulking, refastening loose siding, and sealing asphalt pavements).

Manageable BMAR level

The lower level of priority BMAR projects deferred for various reasons.

Minor repair

Work such as the repair of steps, wall receptacles, and door knobs; replacement of faucet washers; and spot painting.

Preventive maintenance

a. Routine inspection of facilities under standing operating orders.

b. Minor repair by preventive maintenance teams to prevent further deterioration, to provide for health and safety, and to restore the appearance of repaired components.

Repair

The restoration of failed real property facilities or components to an operative condition. This repair includes—

a. Overhauling, overlaying, reprocessing, or replacing constituent parts that have been damaged by wear or tear in use.

b. Correcting conditions that adversely affect using a facility for its intended purpose.

Recurring maintenance

The day-to-day cyclic work required to prevent initial failures and further deterioration of facilities. Included are such tasks as leaf raking, grass cutting, pruning, scheduled lubrication of motors, and changing of filters.

Section III

Special Abbreviations and Terms

There are no special terms.

Instructions for Preparing DA Form 2788-R

General Information

1. Prepare one consolidated report covering all appropriations and funds. Identify the specific carrier installation appropriation or fund citation, e.g., OMA, AIF.

2. Optional columns and lines are specifically identified. They need not be completed, as the computer is programmed to develop such data. Optional lines and columns are included for local use if desired.

3. Performance factors will be reported to the nearest whole unit, e.g., K Gallon means the entry is in thousands.

4. Costs will be reported to the nearest whole dollar.

5. Include data on RPMA type contracts or other operations not processed through the installation carrier program reimbursement procedures.

Part I—Summary

Note. Summarize data from parts III and IV on part I.

Heading Instruction

Item	Instructions
<i>Relation code.</i>	Enter the applicable parent installation or community relation code from appendix I, Army Wide Relation Code List.
<i>Installation name.</i>	Enter the applicable parent installation or community name from appendix I.
<i>MACOM code.</i>	Enter the applicable MACOM code from appendix II, Army Wide Macom Code List.
<i>Fiscal Year.</i>	Enter the fiscal year covered by the report.
<i>Appropriation or fund.</i>	Enter the applicable appropriation or fund from Appendix III, Master Appropriation List. (See note 1 above).
<i>POC and Atv/Ext.</i>	Enter the name and telephone number of the person who should be called for additional information.

Section I—Costs by Element and Major Function (Optional) (Page 1a)

Note. Completion of section I is optional. If it is to be completed, enter data in accordance with the following instructions.

A. Columnar Information

Column	Instructions
Operation of Utilities	
<i>c. Active.</i>	Enter the Total Costs sum from part IV, column <i>m</i> , where the Functional Group Code ends with the letter "J" (less 8000J) or the AMS Code begins with the letter "J" (less J8).
<i>d. Inactive.</i>	Enter the Total Costs of Functional Group Code 8000J, or AMS Code J8, from part IV, column <i>m</i> .

Maintenance of Real Property

<i>e. Active.</i>	Enter the Total Costs sum from part IV, column <i>m</i> , where the Functional Group Code does not end in either the letter "J", "L", or "M" (less 98,000), or AMS Code begins with the letter "K" (less K8).
<i>f. Inactive.</i>	Enter the Total Costs of Functional Group Code 98,000, or AMS Code K8, from part IV, column <i>m</i> .

Minor Construction

<i>g. Active.</i>	Enter the Total Costs from part IV, column <i>m</i> , Functional Group Code 1000L, or AMS Code L1.
<i>h. Inactive.</i>	Enter the Total Costs from part IV, column <i>m</i> , Functional Group Code 2000L, or AMS Code L2.

Engineer Support

<i>i. Active.</i>	Enter the Total Costs sum from part IV, column <i>m</i> , where the Functional Group Code ends with the letter "M" (less 8000M) or the AMS Code begins with the letter "M" (less M8).
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j. Inactive.

Enter the Total Costs of Functional Group Code 8000M, or AMS Code M8, from part IV, column *m*.

RPMA Totals

k. Active.

Completion of this column is optional. If it is to be completed, enter the sum of the columns *c* + *e* + *g* + *i*.

l. Inactive.

Completion of this column is optional. If it is to be completed, enter the sum of columns *d* + *f* + *h* + *j*.

m. Grand total.

Completion of this column is optional. If it is to be completed, enter the sum of columns *k* + *l*.

B. Line Item Information

Line	Instructions
—	All costs will be reported to the nearest whole dollar.

— All Functional Group Codes and related AMS Codes cost elements are active, except for the following codes which are inactive.

Activity	Functional Group Code	AMS Code
Operation of utilities	8000J	J8
Maintenance of real property	98000	K8
Minor construction	2000L	L2
Engineer support	8000M	M8

- Labor.* Enter the active and inactive sums from lines 2 and 3.
- a. Military.* Enter the active and inactive sums from part IV, column *i*, Military.
- b. Civilian.* Enter the active and inactive sums from part IV, column *i*, Civilian.
- Supplies.* Enter the active and inactive sums from part IV, column *h*. Include both "Other" and "Fuel" operating costs.
- Funded contracts.* Enter the active and inactive sums from part IV, column *j*, Equipment (both rental and depreciation operating costs) and column *k*, Contract (both ether and fuel operating costs).
- Other.* Enter the active and inactive sums of part IV, column *i*, Other Costs.
- Total costs.* Completion of this line is optional. If it is to be completed, enter the sums of lines 1 + 4 + 5 + 6.

Section II—Performance Factors (Page 1b)

A. Columnar Information

Column	Instructions
<i>c. Active.</i>	Self-explanatory.
<i>d. Inactive.</i>	Self-explanatory.
<i>e. Total.</i>	Completion of this column is optional. If it is to be completed, enter the sum of columns <i>c</i> + <i>d</i> .

B. Line Item Information

Line	Instructions
—	Enter performance factors to the nearest whole unit.
<i>Population served.</i>	Completion of this line is optional. If it is to be completed, enter the sum from lines <i>a</i> and <i>b</i> .
<i>a. Resident.</i>	Enter the average number of resident military and civilian personnel.

Instructions for Preparing DA Form 2788-R—Continued

b. Non-resident. Enter the average number of non-resident military and civilian personnel.

Maintenance of real property

Gross K sq ft. Completion of this line is optional. If it is to be completed, enter the sum total of part IV, AMS Code K2.

BMAR. Completion of this line is optional. If it is to be completed, enter the sum total of columns *b + c + e + f* of part III—Unfinanced BMAR Workload.

Unfinanced backlog. Completion of this line is optional. If it is to be completed, enter the sum of columns *b + c + e + f* of part III—Unfinanced BMAR Workload, and the sum of columns *b + c* of part III—Unfinanced AFH DMAR Workload.

Section III—Mobile Equipment (Page 1b)

A. Columnar Information

Column	Instructions
<i>c. Value (acquisition).</i>	Enter to the nearest whole dollar facilities engineering mobile equipment having an acquisition cost of \$5,000 or more (less riding grass mowers).
<i>d. Number of items.</i>	Enter the number of facilities engineering mobile equipment items having an acquisition cost of \$5,000 or more (less riding grass mowers).

B. Line Item Information

Line	Instructions
1. <i>On hand at end of prior FY.</i>	Enter amounts from line 7 of previous fiscal year report.
Acquired	
2. <i>A. Sails.</i>	Enter the amount of mobile equipment received (requisitioned) through SAILS (Standard Army Intermediate Logistical System).
3. <i>B. Local.</i>	Enter the amount of mobile equipment purchased with procurement (OPA) funds to include the QRIP (quick return on investment program) and BCE (base-level commercial equipment) programs.
4. <i>C. Other.</i>	Enter the amount of mobile equipment acquired with other than OPA funds. Include items rented (long-term or leading to ownership), redistribution, etc.
5. <i>D. Total.</i>	Completion of this item is optional. If it is to be completed, enter the sum of lines 2 + 3 + 4.
6. <i>Disposed of during FY.</i>	Enter the amount of mobile equipment disposed of, redistributed, or the acquisition cost is no longer above the "investment item" threshold (presently \$5,000).
7. <i>Available at end of FY.</i>	Enter the sum of lines 1 + 5 - 6.
8. <i>Now qualified for replacement.</i>	Enter the amount of mobile equipment items that have exceeded their life expectancies plus those items on hand that are uneconomically repairable.

Section IV—RPMA Work Force (Page 1b)

A. Columnar Information

Column	Instructions
<i>b. Active.</i>	Enter the number of active personnel assigned.
<i>c. Inactive.</i>	Enter the number of inactive personnel assigned.
<i>d. Total.</i>	Completion of this column is optional. If it is to be completed, enter the sum of columns <i>b + c</i> .

B. Line Item Information

Line	Instructions
1. <i>Officers.</i>	Enter the number of personnel assigned within each category in accordance with the provisions of AR 570-3.
2. <i>Enlisted.</i>	
3. <i>US Civilians.</i>	The category, US Civilians, includes direct and contract personnel.
4. <i>Other civilians.</i>	
a. <i>Authorized.</i>	Enter authorized strength.
b. <i>Recognized.</i>	Enter recognized strength.
c. <i>End strength.</i>	Enter the average daily strength for the fiscal year. Include the Director of Engineering and Housing (or Facilities Engineer) and their secretaries. Include all military personnel doing RPMA work even though they are not assigned to the Director of Facilities Engineering and Housing (or Facilities Engineer). This includes personnel assigned to the self-help program.
d. <i>Work year.</i>	Enter cumulative personnel for the fiscal year.

Part II—Direct Financing Obligations Summary (Page 2a)

Note. All amounts shall be in whole dollars.

A. Heading Information

Item	Instructions
<i>Relation code.</i>	Enter the applicable parent installation or community relation code from appendix I, Army Wide Relation Code List.
<i>Installation name.</i>	Enter the applicable parent installation or community name from appendix I.
<i>MACOM code.</i>	Enter the applicable MACOM code from Appendix II, Army Wide MACOM Code List.
<i>Foreign currency rate used.</i>	Enter the foreign currency rate used that would be equal to \$1.00.

B. Columnar Information

Column	Instructions
—	Completion of columns <i>b, c, d</i> and <i>e</i> are self-explanatory.
<i>f. Total.</i>	Completion of column <i>f</i> is optional. If it is to be completed, enter the sum of columns <i>b + c + d + e</i> .

C. Line Item Information

Line	Instructions
<i>Grand total.</i>	Completion of this line is optional. If it is to be completed, enter the sum of lines 1 + 2.
1. <i>Direct financing total.</i>	Enter the sum of lines 1a through 1h.
a. <i>Military personnel army.</i>	Enter the amount of direct obligations for the work year expanded by military personnel.
b. <i>through h.</i>	Enter the direct obligations incurred by each applicable appropriation or fund. Data should be obtained from the installation finance and accounting records.

Part II—Reimbursable Obligations Summary (Page 2b)

Note. All amounts shall be in whole dollars.

Instructions for Preparing DA Form 2788-R—Continued

Item	Instructions
Relation code.	Enter the applicable parent installation or community relation code from appendix I, Army Wide Relation Code List.
Installation name.	Enter the applicable parent installation or community name from appendix I.
MACOM code.	Enter the applicable MACOM code from appendix II, Army Wide Macom Code List.
Foreign currency rate used.	Enter the foreign currency rate used that would be equal to \$1.00. Europe and Japan: enter the value of the established rate of exchange based on execution of the program. Korea: enter the average WON rate.

B. Columnar Information

Column	Instructions
—	Completion of columns <i>b</i> , <i>c</i> , <i>d</i> and <i>e</i> are self-explanatory.
f. Total.	Completion of column <i>f</i> is optional. If it is to be completed, enter the sum of columns <i>b</i> + <i>c</i> + <i>d</i> + <i>e</i> .

C. Line Item Information

Line	Instructions
2. Reimbursables total.	Enter the sum of lines 2a through 2j.
a. through j. except d.	Enter reimbursements collection by the installation or community carrier program from the applicable appropriation or fund. Data should be obtained from the installation finance and accounting records.
d. Army Industrial Fund.	Enter Army Industrial Fund obligations except where operating funds are used as a direct fund source (i.e., OMA, used for underutilized capacity, or direct cite of AFH).

Part III—Unfinanced Workload (Pages 3a and 3b)

A. Heading Information

Item	Instructions
Relation code.	Enter the applicable parent installation or community relation code from appendix I, Army Wide Relation Code List.
Installation name.	Enter the applicable parent installation or community name from appendix I.
MACOM code.	Enter the applicable MACOM code from appendix II, Army Wide MACOM Code List.
Appropriation or fund.	Enter the applicable appropriation or fund from appendix III, Master Appropriation List.
Foreign currency rate used.	Enter the foreign currency rate used that would be equal to \$1.00
Page _____ of _____	Enter the sequential number of each page used, e.g., 1 of 1, or 1 of 2, and 2 of 2.

B. Columnar Information

Column	Instructions
a. Functional group code.	The code applies only to the Maintenance and Repair of Real Property (AMS Code K Account). Enter the applicable functional group codes.

BMAR Direct Financing

- b. Old BMAR.** Enter old BMAR amounts in whole dollars. Old BMAR covers projects identified as BMAR from the previous fiscal year which are valid and which remain unfinanced at the end of the fiscal year and are carried forward as a continuing requirement.

- c. New BMAR.** Enter new BMAR amounts in whole dollars. New BMAR covers valid projects planned for accomplishment during the fiscal year being reported which remain unfinanced at the end of the fiscal year and are carried forward as a continuing requirement.

- d. Total.** Completion of this column is optional. If it is to be completed, enter the sum of columns *b* + *c*.

BMAR Reimbursables

- e. Old BMAR.** See *b*. above. However, funding is to be accomplished through reimbursements to the installation carrier program.

- f. New BMAR.** See *c*. above. However, funding is to be accomplished through reimbursements to the installation carrier program.

- g. Total.** Completion of this column is optional. If it is to be completed, enter the sum of columns *e* + *f*.
Note. The total of columns *b*, *c*, *e* and *f* should equal the Ending Backlog—30 September (line 8, component c, FY Summary Analysis of Direct Backlog Changes, Direct Backlog Status Report. See chapter 4.

C. Line Item Information

Line	Instructions
—	Enter the applicable functional group codes. This page may be reproduced if it cannot accommodate all of the functional group codes required.
—	Funds required should be entered to the nearest whole dollar for each functional group code that meets the criteria for BMAR.

AFH DMAR Direct Financing

The instructions for columns *h*, *i*, and *j* are the same as for columns *b*, *c*, and *d*, except that AFH DMAR should be substituted for BMAR wherever it appears.

Other Unfinanced

Enter total other unfinanced in whole dollars without regard to appropriation or fund.

Part IV—Operating Costs and Performance Data (Pages 4 thru 24)

A. Heading Information

Item	Instructions
Relation code.	Enter the applicable parent installation or community relation code from appendix I, Army Wide Relation Code List.
Installation name.	Enter the applicable parent installation or community name from appendix I.
MACOM code.	Enter the applicable MACOM code from appendix II, Army Wide Macom Code List.
Appropriation or fund.	Enter the applicable appropriation or fund from appendix III, Master Appropriation List. (See General Information note 1).

B. Columnar Information

Column	Instructions
a. Codes—Functional Group and AMS.	Self-explanatory.
b. Activity description.	Activity descriptions are defined in the Headquarters, IFS Fiscal Planning and Reporting (FPR) Module User's Manual.
c. TC.	Type of construction is self-explanatory.
d. WK.	Work class is self-explanatory.
e. Inv Cat.	Inventory category is self-explanatory.
f. Unit.	Self-explanatory.

Instructions for Preparing DA Form 2788-R—Continued

g. Quantities. Enter the applicable quantities on the appropriate lines. Shaded lines require no entry. In some instances two and three entries are called for. Quantities should be entered to the nearest whole unit, e.g., K Gallons should be reported in thousands.

h. Supplies—other and fuel. Enter funded and unfunded costs for consumable and nonconsumable supplies, equipment, and fuel to the nearest whole dollar. Two line entries are provided.

Line 1 _____ Other
Line 2 _____ Fuel

1. On Line 1, Other, enter the cost of all supplies except for contract fuels covered in column k.

2. On Line 2, Fuel, enter the costs of all applicable fuels, except for contract fuels covered in column k.

i. Labor—civilian and military. Enter all funded and unfunded labor costs used to accomplish RPMA functions to the nearest whole dollar. Two line entries are provided.

Line 1 _____ Civilian
Line 2 _____ Military

1. On Line 1, Civilian, enter the sum of assigned and borrowed labor costs used to accomplish RPMA functions. Include U.S. civilians and foreign national employee wages and benefits.

2. On Line 2, Military, enter the sum of assigned and borrowed military labor costs used to accomplish RPMA functions.

j. Equipment—rental and depreciation. Enter all funded and unfunded equipment rental and depreciation costs incurred to accomplish RPMA functions to the nearest whole dollar. Two line entries are provided.

Line 1 _____ Rental
Line 2 _____ Depreciation

1. On Line 1, Rental, enter all equipment rental costs.
2. On Line 2, Depreciation, enter all equipment depreciation costs for Alterations and Minor Construction (L Account).

k. Contract—other and fuel. Enter all funded contract costs. Two line entries are provided.

Line 1 _____ Other
Line 2 _____ Fuel

1. On Line 1, Other, enter all applicable contract costs, except for natural gas.

2. On Line 2, Fuel, enter all applicable natural gas funded contract fuel costs.

l. Other costs. Enter all other costs not previously identified. Only one line is provided.

Line 1 _____ Other Costs

m. Total costs. Completion of this column is optional. If it is to be completed, enter the sum of columns $h + i + j + k + l$. Only one line is provided.

Line 1 _____ Total Costs

Army Wide Relation Code List

MACOM Code	MACOM	Relation Code	Parent Name	MACOM Code	MACOM	Relation Code	Parent Name
AA	CE	33450	Cold Regions Research Labs			200TH TAMMC	
DA	HSC	08055	Fitzsimmons AMC			FRPEO	Petroleum Installations France
		11865	Reed Walter AMC	JA	FCOM	RQ327	Buchanan Ft
		24225	Detrick Ft			02341	Greely Ft
EA	MDW	11605	McNair Ft Lesley J			02781	Richardson Ft
		51115	Cameron Station			02871	Wainwright Ft
		51375	Meyer Ft			02876	Petroleum Div AK
FA	MTMC	06605	Oakland Army Base			06205	Hunter Liggett
		22585	Mil Ocean Ter, LA			06225	Irwin Ft
		34515	Mil Ocean Ter, NJ			06305	Monterey Pres Of
		37745	Mil Ocean Ter, NC			06625	Ord Ft
MA	AREUR					06781	San Fran Pres Of
						08005	Carson Ft
		21ST SUPT CMD				13015	Gillem Ft
		BENSO	Belgium, NSSG			13070	Hunter AAF
		GEHBO	Norddeutschland Community			13115	McPherson Ft
		GEKAO	Karlsruhe Community			13305	Stewart Ft
		GEKLO	Kaiserslautern Community			17805	Sheridan Ft
		GEMAO	Mannheim Community			20605	Riley Ft
		GEPSo	Pirmasens Community			21145	Campbell Ft
		GERBO	Rheinberg Community			22725	Polk Ft
		GEWOO	Worms Community			24355	Meade Ft George G
		GEZWO	Zweibruecken Community			25145	Devens Ft
		NLSCO	Schinnen Community			36205	Drum Ft
		UKUKO	USAREUR United Kingdom			37225	Bragg Ft
		V CORPS				42305	Indiantown Gap Ft
		GEBHO	Baumholder Community			42610	Oakdale Supt FAC
		GEDAO	Darmstadt Community			48255	Hood Ft
		GEFDO	Fulda Community			48265	Houston Ft Sam
		GEFKO	Frankfurt Community	NW	WTCOM	49275	Douglas Ft
		GEGIO	Giessen Community	NS	USARSO	53465	Lewis Ft
		GEHUO	Hanau Community	PA	AMC	55425	McCoy Ft
		GEKHO	Bad Kreuzbach Community			15815	Schofield Barracks
		GEMZO	Mainz Community			PM355	Clayton Army Res Ft
		GEWBO	Wiesbaden Community			GE452	Mainz Ad
		GEWIO	Wildflecken			01012	Anniston AD
		VII CORPS				01202	Redstone Arsenal
		GEABO	Aschaffenburg Community			04985	Yuma Proving Ground
		GEAGO	Augsburg Community			05087	Pine Bluff Arsenal
		GEANO	Ansbach Community			06735	Riverbank AAP
		GEBAO	Bamberg Community			06765	Sacramento AD
		GEGAO	Garmisch Community			06806	Sharpe AD
		GEGPO	Goeppingen Community			06815	Sierra AD
		GEHNO	Hielbronn Community			08505	Pueblo ADA
		GEMHO	Munich Community			08605	Rocky Mtn ARS
		GENBO	Nuernberg Community			17255	St Louis Area Supt Ctn
		GENUO	Neu Ulm Community			17306	Joliet AAP Kankakee
		GESTO	Stuttgart Community			17775	Rock Island Res
		GESWO	Schweinfurt Community			17795	Savanna AD
		GETOO	Bad Toelz Community			18226	Indiana AAP
		GEWUO	Wuerzburg Community			18255	Jefferson Prov Gr
		SETAF				18375	Newport AAP
		ITPLO	Livorno Community			19105	Iowa AAP
		ITVIO	Vicenza Community			20325	Kansas AAP
		TUCAO	Cakmakli			20655	Sunflower AAP
		GRELO	Elefsis			21479	Lexington Blue Grass
		BERLIN BRIGADE				22505	Luisiana AAP
		GEBO	Berlin Brigade			24015	Aberdeen Prov Gr
		26TH SUPPORT GROUP				24234	Harry Diamond Labs
		GEHDO	Heidelberg Community			25690	Natick Dev Center
		7TH ARMY TRAINING COMMAND				25965	USA Mat & Mech Rsh Ctr
		GETGO	7th Army Trng Cmd			26AMC	Selfridge SPT
						26155	Detroit Arsenal
						26156	Detroit Ars Tk Pit
						27650	Twin Cities AAP
						28310	Mississippi AAP
						29405	Lake City AAP
						31135	Cornhusker AAP
						32225	Hawthorne AAP
						34555	Monmouth Ft
						34855	Picatinny Arsenal

APPENDIX I
Army Wide Relation Code List—Continued

MACOM Code	MACOM	Relation Code	Parent Name	MACOM Code	MACOM	Relation Code	Parent Name
		35955	White Sands Msl Rg	TA	INSCM	TK125	Diogenes Station
		35965	Wingate Dep Ft			51060	Arlington Hall Sta
		36760	Seneca AD			51855	Vint Hill Farms Sta
		36990	Watervliet Arsenal				
		39355	Lima Army Tank Gen	TD	TDOC	01102	McClellan Ft
		39747	Ravenna AAP			01252	Rucker Ft
		40520	McAlester AAP			05025	Chaffee Ft
		41725	Umatilla Dep			13025	Benning Ft
		42345	Letterkenny AD			13055	Gordon Ft
		42400	New Cumberland AD			18175	Harrison Ft Ben
		42755	Scranton AAP			20395	Leavenworth Ft
		42780	Tobyhanna AAP			21405	Knox Ft
		47305	Holston AAP			29995	Wood Ft Leonard
		47475	Milan AAP			34245	Dix Ft
		47855	Volunteer AAP			36325	Hamilton Ft
		48AMC	Corpus Christi			40755	Sill Ft
		48305	Lone Star AAP			42155	Carlisle Barracks
		48315	Longhorn AAP			45455	Jackson Ft
		48515	Red River AD			48125	Bliss Ft
		49295	Dugway Prov Gr			51105	Belvoir Ft
		49575	Tooele Army Dep			51215	Eustis Ft
		50340	Ethan Allen Fire Rg			51290	Hill Ft A P
		51565	Radford AAP			51515	Lee Ft
		55125	Badger AAP			51360	Monroe Ft
						51535	Pickett Ft
RA	USMA	36993	West Point Mil Res	UA	ISC	04005	Huachuca Ft
SE	ARJ	JA210	Camp Zama			24625	Ritchie Ft
		JA020	Okinawa				
SG	EUSA	KS948	Eighth US Army				

APPENDIX II

Army Wide MACOM Code List

MACOM Code	MACOM Name
AA	Corps of Engineers
DA	Health Services Command
EA	Military District of Washington
FA	Military Traffic Management Command
MA	Army Europe
JA	Forces Command
NW	Western Command
NS	US Army South
PA	Army Materiel Command
RA	U.S. Military Academy
SE	U.S. Army Japan
SG	Eighth U.S. Army
TA	Intelligence and Security Command
TD	Training & Doctrine Command
UA	Information System Command

APPENDIX III

Master Appropriation List

Code	Appropriation Name
AFH	Family Housing Management Account
AIF	Army Industrial Fund
APA	Aircraft Procurement, Army
CCCC	Special Headquarters Appropriation
GOCO	Government Owned Contractor Operated
MCA	Military Construction, Army
MCAR	Military Construction, Army Reserve
MCNG	Military Construction, National Guard
MLPA	Missile Procurement, Army
MPA	Military Personnel, Army
NAF	Non-Appropriated Funds
NGPA	National Guard Personnel, Army
OMA	Operation and Maintenance, Army
OMAF	Operation and Maintenance, Air Force
OMAR	Operation and Maintenance, Army Reserve
OMN	Operation and Maintenance, Navy
OMNG	Operation and Maintenance, Army National Guard
OPA	Other Procurement, Army
PAA	Procurement of Ammunition, Army
PWA	Procurement of Weapons, Army
RDTE	Research, Development, Test and Evaluation, Army
RPA	Reserve Personnel, Army
ZZZZ	Other

TECHNICAL DATA FEEDER REPORT PART I - SUMMARY										MACOM CODE		RCS & OMB APPROVAL NO. 0704-0188 EXP. 30 JUN 89	
For use of this form, see AR 420-16; the proponent agency is USACE (Dollar amounts in whole dollars.)										RELATION CODE		INSTALLATION NAME	
										FISCAL YEAR		APPROPRIATION OR FUND	
SECTION I - COSTS BY ELEMENT AND MAJOR FUNCTION (OPTIONAL)													
		JO			KO			LO		MO			
COST ELEMENTS		OPERATION OF UTILITIES		MAINTENANCE OF REAL PROPERTY		MINOR CONSTRUCTION		ENGINEER SUPPORT					
		ACTIVE	INACTIVE	ACTIVE	INACTIVE	ACTIVE	INACTIVE	ACTIVE	INACTIVE				
		c	d	e	f	g	h	i	j				
1 LABOR (FUNDED & UNFUNDED)													
2 a. MILITARY (ASSIGNED & BORROWED)													
3 b. CIVILIAN (ASSIGNED & BORROWED)													
4 SUPPLIES (FUNDED & UNFUNDED)													
5 FUNDED CONTRACTS													
6 OTHER (FUNDED & UNFUNDED)													
7 TOTAL COSTS (OPTIONAL)													
RPMA TOTALS (OPTIONAL)													
COST ELEMENTS		ACTIVE (OPTIONAL) (c + e + g + i)		INACTIVE (OPTIONAL) (d + f + h + j)		GRAND TOTAL (OPTIONAL) (k + l)							
		k		l		m							
1 LABOR (FUNDED & UNFUNDED)													
2 a. MILITARY (ASSIGNED & BORROWED)													
3 b. CIVILIAN (ASSIGNED & BORROWED)													
4 SUPPLIES (FUNDED & UNFUNDED)													
5 FUNDED CONTRACTS													
6 OTHER (FUNDED & UNFUNDED)													
7 TOTAL COSTS (OPTIONAL)													
POC AND ATIV/EXT													

TECHNICAL DATA FEEDER REPORT PART I - SUMMARY (Dollar amounts in whole amounts)				RELATION CODE		INSTALLATION NAME		MACOM CODE	
				FISCAL YEAR		APPROPRIATION OR FUND			
SECTION II - PERFORMANCE FACTORS (To Nearest Whole Unit)				SECTION IV - RPMA WORK FORCE					
ACTIVITY a	FACTOR b	ACTIVE c	INACTIVE d	TOTAL (OPTIONAL) e	PERSONNEL a	ACTIVE b	INACTIVE c	TOTAL (OPTIONAL) d	
OPERATION OF UTILITIES .JO	POPULATION SERVED (OPTIONAL)				1. OFFICERS 1a. AUTHORIZED				
	a. RESIDENT (MILITARY & CIVILIAN)				1b. RECOGNIZED				
	b. NON-RESIDENT (MILITARY & CIVILIAN)				1c. END STRENGTH				
MAINTENANCE OF REAL PROPERTY .KO	GROSS K SQ FT (OPTIONAL)				1d. WORK YEAR				
	BMAR (NEAREST \$) (OPTIONAL)				2. ENLISTED 2a. AUTHORIZED				
	UNFINANCED BACKLOG (NEAREST \$) (OPTIONAL)				2b. RECOGNIZED				
SECTION III - MOBILE EQUIPMENT									
LINE a	DESCRIPTION b	VALUE (ACQUISITION) c	NUMBER OF ITEMS d						
1	ON HAND AT END OF PRIOR FISCAL YEAR								
2	ACQUIRED A. SAILS								
3	B. LOCAL								
4	C. OTHER								
5	D. TOTAL (OPTIONAL)								
6	DISPOSED OF DURING FISCAL YEAR								
7	AVAILABLE AT END OF FISCAL YEAR								
8	NOW QUALIFIED FOR REPLACEMENT								
REMARKS									

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)		PART II--DIRECT FINANCING OBLIGATIONS SUMMARY			
RELATION CODE	INSTALLATION NAME	MACOM CODE	FOREIGN CURRENCY RATE USED = \$1.00		
RESOURCES BY SOURCES OF FUNDS AND TYPES OF FINANCING					
BUDGET ACCOUNT a	OPER. OF UTILITIES .JO b	MAINT. & REPAIR .KO c	MINOR CONST. .LO d	ENGINEER SUPPORT .MO e	TOTAL (b + c + d + e) (OPTIONAL) f
GRAND TOTAL (1 + 2) (OPTIONAL)					
1. DIRECT FINANCING TOTAL					
a. MILITARY PERSONNEL, ARMY ¹					
b. OPERATION AND MAINTENANCE, ARMY					
c. RESEARCH, DEVELOPMENT, TEST AND EVALUATION					
d. PROCUREMENT APPROPRIATION					
e. FAMILY HOUSING MANAGEMENT ACCOUNT					
f. OPERATION AND MAINTENANCE, ARMY RESERVE					
g. OTHER FEDERAL SOURCES					
h. OTHER NON-FEDERAL SOURCES					
REMARKS					

1/ ENTER THE AMOUNT OF DIRECT OBLIGATIONS FOR THE WORK YEAR OBLIGATED.

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)		PART II--REIMBURSABLES OBLIGATIONS SUMMARY			
RELATION CODE	INSTALLATION NAME	MACOM CODE	FOREIGN CURRENCY RATE USED	- \$1.00	
RESOURCES BY SOURCES OF FUNDS AND TYPES OF FINANCING					
BUDGET ACCOUNT a	OPER. OF UTILITIES .JO b	MAINT. & REPAIR .KO c	MINOR CONST. .LO d	ENGINEER SUPPORT .MO e	TOTAL (b + c + d + e) (OPTIONAL) f
2. REIMBURSABLES TOTAL ¹					
a. FAMILY HOUSING MANAGEMENT ACCOUNT					
b. RESEARCH, DEVELOPMENT, TEST AND EVALUATION					
c. PROCUREMENT APPROPRIATION (PA)					
d. ARMY INDUSTRIAL FUND ²					
e. OPERATION AND MAINTENANCE, AIR FORCE					
f. OPERATION AND MAINTENANCE, NAVY					
g. OPERATION AND MAINTENANCE, ARMY					
h. OPERATION AND MAINTENANCE, ARMY RESERVES					
i. OTHER FEDERAL SOURCES					
j. OTHER NON-FEDERAL SOURCES					
REMARKS					

1/ ENTER REIMBURSEMENTS COLLECTED BY THE INSTALLATION CARRIER PROGRAM FROM THE APPROPRIATION OR FUND.

2/ EXCLUDE OPERATING FUNDS USED AS DIRECT FUND SOURCE (i.e. OMA USED FOR UNDERUTILIZED CAPACITY, OR DIRECT CITE OF AFH).

TECHNICAL DATA FEEDER REPORT <i>(Dollar amounts in whole dollars)</i>			PART III—UNFINANCED WORKLOAD		PAGE	OF
RELATION CODE	INSTALLATION NAME	MACOM CODE	APPROPRIATION OR FUND	FOREIGN CURRENCY RATE USED		
FUNCTIONAL GROUP CODE	AFH DMAR DIRECT FINANCING			OTHER UNFINANCED	REMARKS	
a	OLD AFH DMAR b	NEW AFH DMAR i	TOTAL (b + c) (OPTIONAL) j	WITHOUT REGARD TO APPROPRIATION/FUND k		

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV-OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE		INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND											
FUNCTIONAL GROUP AMS	CODES	ACTIVITY DESCRIPTION	TW C	INV K	UNIT CAT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h + i + j + k + l) (OPTIONAL)							
a	b	c	d	e	f	g	h	i	j	k	l	m							
OPERATION OF UTILITIES-WATER AND SEWER																			
1100J	- J1	WATER SERVICES PURCHASED WATER	P	R	00	KGAL													
1200J	- J1	WATER SERVICES FILTERED WATER	P	R	00	KGAL													
1300J	- J1	WATER SERVICES UNFILTERED WATER	P	R	00	KGAL													
2100J	- J2	SEWAGE SERVICES PURCHASED SEWAGE DISPOSAL	P	R	00	KGAL													
2210J	- J2	SEWAGE SERVICES PRIMARY PLANT OPERATION	P	R	00	KGAL													
2220J	- J2	SEWAGE SERVICES SECONDARY PLANT OPERATION	P	R	00	KGAL													
2230J	- J2	SEWAGE SERVICES ADVANCED WASTE WATER PLANT OPERATION	P	R	00	KGAL													
2300J	- J2	SEWAGE SERVICES INDUSTRIAL WASTE TREATMENT FACILITIES	P	R	00	KGAL													

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV - OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
CODES	FUNCTIONAL GROUP	ACTIVITY DESCRIPTION	T W I N V	UNIT	QUANTITIES	SUPPLIES	LABOR	EQUIPMENT	CONTRACT	OTHER COSTS	TOTAL COSTS								
a	b	c	d	e	f	g	h	i	j	k	l	m							
OPERATION OF UTILITIES - WATER AND SEWER																			
2400J	-	SEWAGE SERVICES	P	R	00	KGAL													
-	J2	UNTREATED INDUSTRIAL																	
		WASTE AND/OR COOLING																	
		WATER																	
OPERATION OF UTILITIES - ELECTRICAL																			
3100J	-	PURCHASED	P	R	00	MWH													
-	J3	ELECTRIC																	
		ENERGY																	
3200J	-	ELECTRIC	P	R	00	MWH													
-	J3	GENERATING																	
		PLANT OPERATION																	
OPERATION OF UTILITIES - HEATING																			
4110J	-	GAS FIRED	P	R	00	MBTU													
-	J4	BOILER PLANTS																	
		OVER 3.5 MBTU				KCF													
		PER HOUR																	
		CAPACITY				SDTN													
4120J	-	OIL FIRED	P	R	00	MBTU													
-	J4	BOILER PLANTS																	
		OVER 3.5 MBTU				KCF													
		PER HOUR																	
		CAPACITY				SDTN													
4130J	-	COAL FIRED	P	R	00	MBTU													
-	J4	BOILER PLANTS																	
		OVER 3.5 MBTU				KCF													
		PER HOUR																	
		CAPACITY				SDTN													

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV--OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE		INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND											
FUNCTIONAL GROUP AMS a	ACTIVITY DESCRIPTION b	TW C/K c	INV CAT d	UNIT e	QUANTITIES f	SUPPLIES OTHER FUEL g	LABOR CIVILIAN MILITARY h	EQUIPMENT RENTAL DEPRECIATION i	CONTRACT OTHER FUEL j	OTHER COSTS k	TOTAL COSTS (h + i + j + k + l) (OPTIONAL) m								
OPERATION OF UTILITIES--HEATING																			
4210J - J4	GAS-FIRED HEATING PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P	R	00	MBTU														
					KCF														
					SDTN														
4220J - J4	OIL-FIRED HEATING PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P	R	00	MBTU														
					KCF														
					SDTN														
4230J - J4	COAL-FIRED HEATING PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P	R	00	MBTU														
					KCF														
					SDTN														
4310J - J4	GAS FIRED HEATING PLANTS .75 TO 3.5 MBTU PER HOUR CAPACITY	P	R	00	MBTU														
					KCF														
					SDTN														
4320J - J4	OIL-FIRED HEATING PLANTS .75 TO 3.5 MBTU PER HOUR CAPACITY	P	R	00	MBTU														
					KCF														
					SDTN														
REMARKS																			

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV-OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE			INSTALLATION NAME				MACOM CODE			APPROPRIATION OR FUND									
CODES		ACTIVITY DESCRIPTION		T W INV C K CAT		UNIT		QUANTITIES		SUPPLIES		LABOR		EQUIPMENT		CONTRACT		TOTAL COSTS	
FUNCTIONAL GROUP AMS		b		c d e		f		g		h		i		j		k		(h + i + j + k + l) (OPTIONAL) m	
OPERATION OF UTILITIES-HEATING																			
4330J	- J4	COAL-FIRED HEATING PLANTS .75 TO 3.5 MBTU PER HOUR CAPACITY		P R	00	MBTU													
							KCF												
							SDTN												
4410J	- J4	GAS-FIRED HEATING PLANTS UNDER .75 MBTU PER HOUR CAPACITY		P R	00	MBTU													
							KCF												
							SDTN												
4420J		OIL-FIRED		P R	00	MBTU													
							SDTN												
4430J	- J4	COAL-FIRED HEATING PLANTS UNDER 7.5 MBTU PER HOUR CAPACITY		P R	00	MBTU													
							KCF												
							SDTN												
4500J	- J4	PURCHASED STEAM AND HOT WATER		P R	00	MBTU													
REMARKS																			

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV--OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
FUNCTIONAL GROUP AMS	ACTIVITY DESCRIPTION	TW INV CK CAT	UNIT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h+i+j+k+l) OPTIONAL									
a	b	c	d e	f	h	i	j	k	l	m									
OPERATION OF UTILITIES--OTHER																			
5100J	AIR CONDITIONING PLANTS	P R	00	TONS															
- J5	ALL TONNAGE CAPACITY																		
5200J	COLD STORAGE PLANTS	P R	00	HP															
- J5	INCLUDING ICE MANUFACTURING																		
8000J	OPERATION OF UTILITIES--INACTIVE INSTALLATIONS	P R	00																
- J8																			
9100J	UTILITIES CONNECTION COSTS	P R	00																
- J9																			
9200	OTHER UTILITIES (LESS CONNECTION COSTS)	P R	00																
- J9																			
REMARKS																			

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV - OPERATING COSTS AND PERFORMANCE DATA															
RELATION CODE		INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND				QUANTITIES		SUPPLIES OTHER FUEL		LABOR CIVILIAN MILITARY		EQUIPMENT RENTAL DEPRECIATION		CONTRACT OTHER FUEL		OTHER COSTS		TOTAL COSTS (h + i + j + k + m) (OPTIONAL)	
FUNCTIONAL GROUP AMS	a	ACTIVITY DESCRIPTION	b	TW/INV C/K CAT	c	UNIT	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
MAINTENANCE OF REAL PROPERTY - WATER, SEWER & ELECTRIC																									
84110	- K1	WATER SYSTEMS TREATMENT AND FILTRATION PLANTS		P	R	17	KGPD																		
84130	- K1	WATER SYSTEMS TREATMENT AND FILTRATION SOURCES		P	R	17	KGPD																		
84470	- K1	WATER SYSTEMS WELLS		P	R	17	KGPD																		
84210	- K1	WATER SYSTEMS DISTRIBUTION SYSTEMS MAINS AND LATERALS		P	R	17	KLF																		
84220	- K1	WATER SYSTEMS DISTRIBUTION SYSTEMS PUMPING STATIONS		P	R	17	KGPD																		
84230	- K1	WATER SYSTEMS DISTRIBUTION SYSTEMS STORAGE		P	R	17	KGPD																		
83111	- K1	SEWER SYSTEMS PRIMARY TREATMENT PLANTS		P	R	17	KGPD																		
83112	- K1	SEWER SYSTEMS SECONDARY TREATMENT PLANTS		P	R	17	KGPD																		

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV - OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE		INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND											
FUNCTIONAL GROUP AMS a	ACTIVITY DESCRIPTION b	TWINV C/K c	UNIT CAT d	QUANTITIES g	SUPPLIES OTHER FUEL h	LABOR CIVILIAN MILITARY i	EQUIPMENT RENTAL DEPRECIATION j	CONTRACT OTHER FUEL k	OTHER COSTS l	TOTAL COSTS (h + i + j + k + l) (OPTIONAL) m									
MAINTENANCE OF REAL PROPERTY - WATER, SEWER & ELECTRIC																			
83113	SEWER SYSTEMS ADVANCED WASTE- WATER TREATMENT PLANTS	P	R 17	KGPD															
83114	SEWER SYSTEMS INDUSTRIAL WASTE TREATMENT FACILITIES	P	R 17	KGPD															
83210	SEWAGE COLLECTION SYSTEMS SANITARY MAINS AND LATERALS	P	R 17	KLF															
83230	SEWAGE COLLECTION SYSTEMS SANITARY PUMPING PLANTS	P	R 17	KGPD															
83240	SEWAGE COLLECTION SYSTEMS INDUSTRIAL WASTE- MAINS AND LATERALS	P	R 17	KLF															
83230A	SEWAGE COLLECTION SYSTEMS INDUSTRIAL WASTE PUMPING PLANTS	P	R 17	KGPD															
81100	ELECTRIC SYSTEMS ELECTRIC GENERATING PLANTS	P	R 17	KVA NO PLTS															
81241	ELECTRIC DISTRIBUTION SYSTEMS OVERHEAD	P	R 17	KLF															

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV—OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
FUNCTIONAL GROUP AMS a	ACTIVITY DESCRIPTION b	TW INV C/K CAT c d e	UNIT f	QUANTITIES g	SUPPLIES OTHER FUEL h	LABOR CIVILIAN MILITARY i	EQUIPMENT RENTAL DEPRECIATION j	CONTRACT OTHER FUEL k	OTHER l	TOTAL COSTS (h + i + j + k + l) (OPTIONAL) m									
MAINTENANCE OF REAL PROPERTY—WATER, SEWER & ELECTRIC																			
81242	ELECTRIC DISTRIBUTION SYSTEMS UNDERGROUND	P R 17	KLF																
81260	ELECTRIC DISTRIBUTION TRANSFORMERS	P R 17	KVA																
81230	EXTERIOR LIGHTING	P R 17	NO LTS																
81300	SUBSTATIONS AND SWITCHING STATIONS	P R 17	NO PLTS																
MAINTENANCE OF REAL PROPERTY—HEATING																			
82131	GAS-FIRED BOILER PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P R 17	MBTU NO PLTS																
82121	OIL-FIRED BOILER PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P R 17	MBTU NO PLTS																
82111	COAL-FIRED BOILER PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P R 17	MBTU NO PLTS																
82132	GAS-FIRED HEATING PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P R 17	MBTU NO PLTS																

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV--OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
CODES		ACTIVITY DESCRIPTION		TWINV. C K CAT		UNIT		QUANTITIES		SUPPLIES		LABOR		EQUIPMENT		CONTRACT		TOTAL COSTS	
FUNCTIONAL GROUP		DESCRIPTION		C K CAT		UNIT		QUANTITIES		OTHER FUEL		CIVILIAN MILITARY		RENTAL DEPRECIATION		OTHER FUEL		(h + i + j + k + l) (OPTIONAL)	
AMS		b		c d e		f		g		h		i		j		k		m	
MAINTENANCE OF REAL PROPERTY--HEATING																			
82122	-	K1	OIL-FIRED HEATING PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82112	-	K1	COAL-FIRED HEATING PLANTS OVER 3.5 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82133	-	K1	GAS-FIRED HEATING PLANTS .75 TO 3.5 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82123	-	K1	OIL-FIRED HEATING PLANTS .75 TO 3.5 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82113	-	K1	COAL-FIRED HEATING PLANTS .75 TO 3.5 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82134	-	K1	GAS-FIRED HEATING PLANTS UNDER .75 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82124	-	K1	OIL-FIRED HEATING PLANTS UNDER .75 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												
82114	-	K1	COAL-FIRED HEATING PLANTS UNDER .75 MBTU PER HOUR CAPACITY	P	R	17	MBTU												
							NO												
							PLTS												

TECHNICAL DATA FEEDER REPORT										PART IV-OPERATING COSTS AND PERFORMANCE DATA									
(Dollar amounts in whole dollars)																			
RELATION CODE		INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND											
FUNCTIONAL GROUP AMS a	ACTIVITY DESCRIPTION b	TW INV CK CAT d e	UNIT f	QUANTITIES g	SUPPLIES OTHER FUEL h	LABOR CIVILIAN MILITARY i	EQUIPMENT RENTAL DEPRECIATION j	CONTRACT OTHER FUEL k	OTHER COSTS l	TOTAL COSTS (h + i + j + k + l) (OPTIONAL) m									
MAINTENANCE OF REAL PROPERTY-HEATING																			
82200	STEAM AND HOT WATER DISTRIBUTION SYSTEMS (CATEGORY 822)	P R	17	KLF															
82400	GAS DISTRIBUTION SYSTEMS	P R	17	KLF															
82300	GAS STORAGE AND GENERATING FACILITIES	P R	17	NO FAC															
MAINTENANCE OF REAL PROPERTY-AIR CONDITIONING AND REFRIGERATION																			
82611	AIR CONDITIONING PLANTS OVER 5 TONS	P R	17	TONS															
82614	AIR CONDITIONING PLANTS 5 TONS AND UNDER	P R	17	TONS															
82621	REFRIGERATION	P R	17	HP															
43000	COLD STORAGE PLANTS INCLUDING ICE MANUFACTURING	P R	17	HP															
REMARKS																			

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV - OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE		INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND											
FUNCTIONAL GROUP AMS	ACTIVITY DESCRIPTION	TWINV. C/K	UNIT CAT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h + i + j + k + l) (OPTIONAL)									
a	b	c	d	e	f	g	h	i	j	k	l	m							
MAINTENANCE OF REAL PROPERTY - OTHER UTILITIES																			
89080	UTILITIES CONNECTION COSTS	P R	17																
- K1																			
89090	OTHER UTILITIES (LESS CONNECTION COSTS)	P R	17																
- K1																			
MAINTENANCE OF REAL PROPERTY - BUILDINGS																			
17100	TRAINING BUILDINGS (CATEGORY 171)	P R	05	KSF															
- K2																			
21000	MAINTENANCE AND PRODUCTION BUILDINGS (CATEGORIES 211-219, 221-229)	P R	06	KSF															
- K2																			
30000	RESEARCH, DEVELOPMENT AND TEST BUILDINGS (CATEGORY 310)	P R	08	KSF															
- K2																			
42000	STORAGE BUILDINGS (CATEGORIES 421-424, 441-442)	P R	10	KSF															
- K2																			
51000	HOSPITAL AND MEDICAL BUILDINGS (CATEGORIES 510, 530-550)	P R	12	KSF															
- K2																			
60000	ADMINISTRATION BUILDINGS (CATEGORY 610)	P R	13	KSF															
- K2																			

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV-OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM		APPROPRIATION OR FUND									
FUNCTIONAL GROUP	AMC	ACTIVITY DESCRIPTION	TIME UNIT	QUANTITIES	SUPPLIES	LABOR	EQUIPMENT	CONTRACT	TOTAL COSTS										
a	b	c	d	e	f	g	h	i	j	k	l	m							
MAINTENANCE OF REAL PROPERTY - BUILDINGS																			
72000	-	UNACCOMPANIED PERSONNEL HOUSING BUILDINGS (CATEGORIES 721-724)	PR 15	KSF															
73000	-	COMMUNITY BUILDINGS (CATEGORIES 730 AND 740)	PR 16	KSF															
71000	-	FAMILY HOUSING BUILDINGS (CATEGORIES 711 AND 714)	PR 14	KSF															
10000	-	OTHER BUILDINGS (CATEGORIES NOT OTHERWISE ASSIGNED)	PR 01	KSF															
MAINTENANCE OF REAL PROPERTY - ROADS AND GROUNDS																			
87500	-	IMPROVED GROUNDS	PR 18	ACRES															
87610	-	OTHER THAN IMPROVED GROUNDS	PR 18	ACRES															
87620	-	EXPENSES RELATED TO AGRICULTURE AND GRAZING LEASES	PR 18	ACRES															
860158	-	RAILROADS-INACTIVE	PR 18	KLF															

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV—OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
FUNCTIONAL GROUP AMS	CODES	ACTIVITY DESCRIPTION	TW CK	INV CAT	UNIT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h + i + j + k + l) (OPTIONAL)							
a	b	c	d	e	f	g	h	i	j	k	l	m							
MAINTENANCE OF REAL PROPERTY—ROADS AND GROUNDS																			
11000B	— K5	AIRFIELD PAVEMENT: BITUMINOUS SURFACE	P R	03	KS														
11000A	— K5	AIRFIELD PAVEMENT: OTHER	P R	03	KS														
85200S	— K5	SIDEWALKS: (CATEGORY 852)	P R	18	KS														
85200P	— K5	PARKING VEHICULAR (CATEGORY 852)	P R	18	KS														
85200	— K5	OPEN STORAGE (CATEGORY 425, 451, 452)	P R	18	KS														
85120A	— K5	BRIDGES: VEHICULAR INSTALLATION ROAD NETWORK	P R	18	NO BDGS														
85300B	— K5	BRIDGES: VEHICULAR TRAINING AREAS	P R	18	NO BDGS														
85300	— K5	BRIDGES AND TRESTLES RAILROADS	P R	18	NO BDGS														

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV-OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
CODES		ACTIVITY DESCRIPTION		TW INV CK CAT		UNIT		QUANTITIES		SUPPLIES		LABOR		EQUIPMENT		CONTRACT		TOTAL COSTS	
FUNCTIONAL GROUP AMS		b		c d e		f		g		h		i		j		k		(h + i + j + k + l) (OPTIONAL) m	
MAINTENANCE OF REAL PROPERTY-ROADS AND GROUNDS																			
150008	-	K6	WATER FRONT FACILITIES AND WATERWAYS	PR	04		NO FAC												
62110	-	K6	MAINTENANCE AND REPAIR OF EQUIPMENT IN PLACE	PR	06														
62120	-	K6	PURCHASE OF EQUIPMENT IN PLACE	PR	16														
62130	-	K6	RENTAL OF EQUIPMENT IN PLACE	PR	16														
62210	-	K6	MAINTENANCE AND REPAIR OF FACILITIES ENGINEERING EQUIPMENT	PR	06														
62220	-	K6	PURCHASE OF FACILITIES ENGINEERING EQUIPMENT	PR	16														
62230	-	K6	RENTAL OF FACILITIES ENGINEERING EQUIPMENT	PR	06														
10000A	-	K6	BUILDING RELATED FACILITIES																

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV-OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
FUNCTIONAL GROUP	AMC	ACTIVITY DESCRIPTION	TW C/K	INV CAT	UNIT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h + i + j + k + l) (OPTIONAL)							
MAINTENANCE OF REAL PROPERTY-ROADS AND GROUNDS																			
64000	-	NATIONAL HISTORIC PRESERVATION PROGRAM	P R	16	NO PAC														
98000	-	MAINTENANCE AND REPAIR-INACTIVE INSTALLATIONS/FACILITIES	P R	00	KSF														
91000	-	HAND TOOLS AND PERSONNEL SAFETY EQUIPMENT			BM\$														
ALTERATIONS AND MINOR CONSTRUCTION																			
1000L	-	ALTERATIONS AND MINOR CONSTRUCTION-ACTIVE FACILITIES	P R	00															
2000L	-	ALTERATION AND MINOR CONSTRUCTION-INACTIVE FACILITIES	P R	00															
REMARKS																			

TECHNICAL DATA FEEDER REPORT (dollar amounts in whole dollars)										PART IV--OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
FUNCTIONAL GROUP AMS	CODES	ACTIVITY DESCRIPTION	TW INV C/K ACT	UNIT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h + i + j + k + l) (OPTIONAL)								
a	b	c	d	e	f	g	h	i	j	k	m								
ENGINEER SUPPORT																			
1100M	- M1	FIREFIGHTERS	P R 00	NO PER															
1200M	- M1	FIRE CHIEFS AND INSPECTORS	P R 00	NO PER															
1300M	- M1	OTHER FIRE PREVENTION AND PROTECTION COSTS	P R 00	NO PER															
2110M	- M2	REFUSE COLLECTION IN-HOUSE	P R 00	KCY															
2120M	- M2	REFUSE COLLECTION CONTRACT	P R 00	KCY															
2211M	- M2	SANITARY LAND FILL	P R 00	KCY															
2212M	- M2	INCINERATION	P R 00	KCY															
2213M	- M2	RESOURCE RECOVERY/ RECYCLING	P R 00	KCY															

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV—OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND									
CODES		ACTIVITY DESCRIPTION		TW	INV	UNIT		QUANTITIES	SUPPLIES OTHER FUEL h	LABOR CIVILIAN MILITARY i	EQUIPMENT RENTAL DEPRECIATION j	CONTRACT OTHER FUEL k	OTHER COSTS l	TOTAL COSTS (h + i + j + k + l) (OPTIONAL) m					
FUNCTIONAL GROUP AMS a	b	c	d	e	f	g													
ENGINEER SUPPORT																			
2214M — M2	SOURCES SEPARATION OF PAPER	P R	00	KCY															
2215M — M2	OTHER DISPOSAL	P R	00	KCY															
2220M — M2	REFUSE DISPOSAL CONTRACT	P R	00	KCY															
3100M — M3	PEST CONTROL BUILDINGS	P R	00	KSF															
3200M — M3	PEST CONTROL GROUNDS	P R	00	ACRES															
4100M — M4	CUSTODIAL SERVICES CONTRACT	P R	00	KSF															
4200M — M4	CUSTODIAL SERVICES IN-HOUSE	P R	00	KSF															
5000M — M5	SNOW AND SAND REMOVAL, ICE ALLEVIATION AND SNOW FENCES	P R	00																

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV-OPERATING COSTS AND PERFORMANCE DATA										
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND										
CODES		ACTIVITY DESCRIPTION		TW	INV	UNIT	QUANTITIES		SUPPLIES		CIVILIAN		EQUIPMENT		CONTRACT		OTHER COSTS		TOTAL COSTS	
FUNCTIONAL GROUP	AMS	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
6100M	-	M6	MANAGEMENT AND ENGINEERING (LESS MASTER PLANNING)	P	R	00														
6200M	-	M6	MASTER PLANNING	P	R	00														
6300M	-	M6	ENVIRONMENTAL PROGRAM MANAGEMENT-ACTIVE INSTALLATIONS	P	R	00														
6400M	-	M6	FACILITIES TECHNOLOGY APPLICATION TESTS	P	R	00														
7100M	-	M7	DIVISION ENGINEER OFFICE EXPENSE	P	R	00														
7200M	-	M7	REAL ESTATE ADMINISTRATION	P	R	00														
7300M	-	M7	ADMINISTRATIVE EXPENSES RELATED TO AGRICULTURE AND GRAZING LEASES (COE ONLY)	P	R	00														
7400M	-	M7	CONSTRUCTION SUPPORT PROGRAMS	P	R	00														

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)				PART IV-OPERATING COSTS AND PERFORMANCE DATA									
RELATION CODE		INSTALLATION NAME		MACOM CODE		APPROPRIATION OR FUND							
FUNCTIONAL GROUP AMS	ACTIVITY DESCRIPTION	TW INV C/K CAT	UNIT	QUANTITIES	SUPPLIES OTHER FUEL	LABOR CIVILIAN MILITARY	EQUIPMENT RENTAL DEPRECIATION	CONTRACT OTHER FUEL	OTHER COSTS	TOTAL COSTS (h + i + j + k + l) (OPTIONAL)			
a	b	c	d	e	f	g	h	i	j	k	l	m	
8000M	ENGINEERING SUPPORT-INACTIVE INSTALLATIONS/ FACILITIES	P R	00										
- M8													
9100M	REAL ESTATE TRANSACTIONS	P R	00										
- M9													
9200M	INSTALLATION OF INTRUSION DETECTION SYSTEMS	P R	00	NO UNIT									
- M9													
9300M	FAMILY HOUSING HOUSEHOLD EQUIPMENT MAINTENANCE	P R	00	MHRS NO UNITS									
- M9													
9400M	SPECIAL MAINTENANCE ACTIVITIES	P R	00										
- M9													
9500M	PACKING AND CRATING	P R	00										
- M9													
9610M	FACILITIES ENGINEERING SUPPLY OPERATIONS	P R	00										
- M9													
9700M	PURCHASED FACILITIES ENGINEERING SERVICES	P R	00										
- M9													

TECHNICAL DATA FEEDER REPORT (Dollar amounts in whole dollars)										PART IV—OPERATING COSTS AND PERFORMANCE DATA										
RELATION CODE				INSTALLATION NAME				MACOM CODE		APPROPRIATION OR FUND						TOTAL COSTS (h + i + j + k + l) (OPTIONAL) m				
FUNCTIONAL GROUP AMS a		ACTIVITY DESCRIPTION b		TWINV C/K ACT c d e		UNIT f		QUANTITIES g		SUPPLIES OTHER FUEL h		LABOR CIVILIAN MILITARY i		EQUIPMENT RENTAL DEPRECIATION j		CONTRACT OTHER FUEL k		OTHER COSTS l		
ENGINEER SUPPORT																				
9810M			MAINTENANCE AND REPAIR OF EQUIPMENT																	
9820M			PURCHASE OF EQUIPMENT																	
9830M			RENTAL OF EQUIPMENT																	
9900M			DEMOLITION OF REAL PROPERTY																	
9050M			SPECIALIZED BUILDING EQUIPMENT—ACQUISITION, INSTALLATION, MAINTENANCE																	
REMARKS																				

Instructions for Preparing DA Form 4223-R

Part I. General Information

Item	Instructions
1. <i>Fiscal Year coverage.</i>	Three separate consolidated fiscal year reports will be prepared covering the budget year, the budget year + 1, and the budget year + 2 for each appropriation and fund, e.g., OMA, OMAR, RDTE, OPA, and AFH.
2. <i>Obligations.</i>	Enter the obligations (new dollars) required each fiscal year.
3. <i>Dollar amount.</i>	Enter all dollar amounts in thousands. For example, \$545,303.24 would be entered as \$545.
4. <i>Signatures.</i>	All reports must contain concurrence and approval signatures on page 1.
5. <i>Accuracy.</i>	All column and line entries should be checked for accuracy before submission.

Part II. Heading Information

Item	Instructions
1. <i>Fiscal Year.</i>	Enter the applicable fiscal year on each page.
2. <i>Appropriation or fund.</i>	Enter the applicable appropriation or fund citation on each page. (See item 1, part I above).
3. <i>Constant FY dollar used.</i>	Enter the current fiscal year on all three fiscal years. Reports will be prepared in current fiscal year dollars. Do not attempt to estimate inflationary impacts.
4. <i>Foreign currency rate used.</i>	Enter the foreign currency rate used that would be equal to \$1.00 in all three fiscal years. Do not attempt to estimate inflationary impacts.
5. <i>Command.</i>	Enter either the name of the installation, community, activity, or MACOM on each page.
6. <i>POC and Atv/Ext.</i>	Enter the name and autovon extension of the person who should be called to obtain additional information on page 1.

Part III. Columnar Information

Column	Instructions
a. <i>Line No.</i>	Self-explanatory.
b. <i>Functional categories.</i>	Definitions are contained in AR 37-100-XX. Each entry should cover both active and inactive installations.
c. <i>Unit of measure.</i>	See AR 37-100-XX.
d. <i>Number of units.</i>	Enter quantities in the nearest whole unit of measure. This column should be completed first.

Fiscal Year Requirements

- e. *Annual recurring requirements.* Enter the dollar amount of annual recurring requirements needed to operate and maintain the real property investment during the fiscal year, whether it is to be accomplished by installation forces or by contract. Examples include:
1. Scheduled operations, maintenance and repair, and services needed to sustain occupant activities, prevent avoidable deterioration of the physical plant, and preserve real property while providing normal custodial and disposal functions.
 2. Continuing year-round requirements, such as utility plant operations, operation of water treatment plants, sewage plants, high pressure boiler plants, warehouse and supply activities, fire prevention and protection services, land management and forestry services, and custodial services.

3. Planned cyclical requirements. Examples include painting on a five-year cyclical basis, with 20 percent accomplished each year; and planned replacement of roofs on a 20-year cyclical basis, with five percent of the roofs replaced each year.

f. *One-time requirements.*

One-time requirements are those additional requirements not covered by annual recurring requirements. Each such requirement would have a beginning and ending date. Most one-time requirements would be completed within one or two fiscal years. Upon completion they would become either part of annual recurring requirements, or would be dropped from total requirements. Examples include:

1. Changes in missions, programs, and operational needs.

2. A division may be transferred to your installation or community. This may necessitate the opening of additional barracks, causing increases in utility, maintenance, custodial and refuse collection services. Depending upon the timing of the transfer, this may be completed within one or two fiscal years. Thereafter, increased costs would appear in column e, Annual Recurring Requirements.

3. Five percent of the roofs are planned for replacement each year (e.3. above). The damage from weather is so severe that it becomes necessary during a given fiscal year to replace 15 percent of the roofs. Under such a circumstance, five percent of the dollars would be entered in column e, Annual Recurring Requirements, and 10 percent would be entered in column f, One-Time Requirements. Other examples would include excessive damage to pipes caused by acts of nature, and barracks severely damaged.

4. Higher authority has directed special studies/surveys be conducted by a given time frame. Efforts require contractual support services, thus additional one-time resources in support thereof would need to be programmed.

Note.

1. Annual Recurring Requirements (column e) amounts should be the sum of the number of units (column d) times the applicable unit price factor.

2. The applicable unit price factor represents the amount of dollars per each unit of workload required to maintain a real property, facility for one year in accordance with established standards. For example, a barrack has 6,000 square feet. To maintain this facility for one year costs \$3.40 per square foot. If there are 10 like barracks, the fiscal year total would be computed as follows:

a. 6,000 square feet per barracks \times \$3.40 = \$20,400.

b. 10 barracks \times \$20,400 = \$204,000.

c. The cost of any unusual maintenance and repair projects, such as replacement of roofs not covered by the unit cost factor, would need to be added to the \$204,000 to reflect total fiscal year costs.

3. Use the maintenance cost factors shown in table 2-1 if local factors have not been developed. These may be adjusted to account for differences in the availability and cost of labor in each specific geographical area.

g. *Fiscal Year total.* Enter the sum of columns e + f.

Total Requirements

h. *BMAR/DMAR.* This column applies only to Maintenance and Repair of Real Property. Enter the applicable BMAR or AFH DMAR amounts.

Notes.

1. Budget Year Report. Enter in column h the sum of the estimated amounts of columns m + n as of 30 September of the *current* year. Enter the estimated unfunded requirements amounts in columns l, m, and n as of 30 September of the *budget* year. (Column h represents a 1 October or beginning of the fiscal year amount, whereas columns l, m, and n represent a 30 September or end of the fiscal year amounts).

Instructions for Preparing DA Form 4223-R—Continued

2. Budget Year + 1. Enter in column *h* the sum of the estimated amounts of columns *m* + *n* as of the 30 September of the budget year. Enter the estimated unfunded requirements amounts in columns *l*, *m*, and *n* as of 30 September of the budget year + 1.

3. Budget year + 2. Enter in column *h* the sum of the estimated amounts of columns *m* + *n* as of 30 September of the budget year + 1. Enter estimated unfunded requirements amounts in column *l*, *m*, and *n* as of 30 September of the budget year + 2.

l. Grand total. Enter the sum of columns *g* + *h*.

Funded and Unfunded Requirements

j. Total funding available. Enter the total amount of dollars resources programmed as being available to the Director of Engineering and Housing.

k. Unfunded requirements. Enter the total dollar resources not available to the Director of Engineering and Housing.

Note. Column *i* minus column *j* should equal column *k*.

Unfunded Requirements.

(Applies only to Maintenance and Repair of Real Property, lines 12 through 32).

l. Recurring non-BMAR/DMAR. Enter the estimated dollar value of recurring non-BMAR or non-AFH DMAR that needs to be accomplished during each fiscal year but for lack of resources are unfunded when this report is prepared. (See column *h* note). These unfunded fiscal year requirements never qualify as BMAR or AFH DMAR. Examples include grass cutting, pruning trees, preventive maintenance, and rescheduling of painting.

m. Potential BMAR/DMAR. Enter the estimated dollar value of projects planned for accomplishment during each fiscal year but for lack of resources are unfunded when this report is prepared. These projects are candidates for BMAR and AFH DMAR. (See column *h* note).

n. Deferred BMAR/DMAR. Enter the dollar amount of BMAR or AFH DMAR for the period beginning October 1 that must be dealt with during the fiscal year, less the amount included in column *j*, which represents the amount to be financed during the fiscal year. (See column *h* note).

Note. The sum of the columns *l* + *m* + *n* should equal column *k*.

Part IV. Line Item Information

Line	Instructions
—	Each line with a functional account reference corresponds to an Army Management Structure (AMS) code listed in AR 37-100-XX. Both the RPMA and Army Family Housing references are shown whenever applicable.
—	Functional account line references are self-explanatory, except for the following lines.
1. <i>Operation of utilities.</i>	This line is the sum of lines 2 + 5 + 8 through 11. The same line totals should be entered on line 45.
2. <i>Electrical.</i>	This line is the sum of lines 3 + 4.
5. <i>Heating.</i>	This line is the sum of lines 6 + 7.
12. <i>Maintenance and repair of real property.</i>	This line is the sum of lines 13 + 14. The same line total should be entered on line 46.
14. <i>Other real property.</i>	This line is the sum of lines 15 + 28 through 31.
15. <i>Building total.</i>	This line is the sum of lines 16 through 24 + 27.

24. *Family housing dwellings.*

This line is the sum of lines 25 + 26.

32. *Major RPMA M&R projects (exclude line 24) (Non-add memo entry).*

Enter the number and dollar amount total of RPMA projects costing in excess of \$200,000 per project included within line 12, Maintenance and Repair of Real Property. Exclude line 24, Family Housing Dwellings. Include a general explanation in remarks covering the total dollar amount of these major projects. It is not necessary to explain each project.

33. *Minor construction.*

Enter the number and dollar amount totals of minor construction projects. Enter the same dollar amount totals on line 47.

34. *Engineer support.*

This line is the sum of lines 35 + 41 + 42 + 44. The same line totals should be entered on line 48.

35. *A. Services.*

This line is the sum of lines 36 through 40.

49. *Total requirements.*

Enter the sum of lines 45 through 48. This line represents total Real Property Maintenance Activities Requirements.

50. *Manageable BMAR level.*

Enter the lower level of priority BMAR projects deferred for various reasons, but which are still required to bring facilities up to an acceptable level to meet their intended purposes.

Part V. MACOM Variance Explanations

Instructions

1. This part applies to:

a. The MACOM's consolidated report.
b. Operations of Utilities (.J0), Maintenance and Repair of Real Property (.K0), Minor Construction (.L0), and Engineering Support (.M0).

2. MACOM's may request supplemental information and data from the installations, communities, and activities under their jurisdiction for internal management purposes.

3. Each MACOM .J0, .K0, .L0, and .M0 dollar variance at the fiscal year total requirements level (column *g*) specified in paragraphs 4, 5, and 6 below must be briefly but clearly explained. Such explanations will enable a more adequate and timely response to be made to questions raised by the Army, DOD, Office of Management and Budget, and the Congress, as well as by the Army Audit Agency, the Congressional Budget Office, and the General Accounting Office.

4. Maintenance and Repair of Real Property—Line 46, and Engineer Support—Line 48.

a. Each Maintenance and Repair of Real Property, and each Engineer Support variance at the MACOM level which exceeds plus or minus three percent at the fiscal year total requirements level (column *g*) must be briefly but clearly explained.

b. Upon preparing a consolidated report covering, e.g., fiscal years 1989, 1990, and 1991 a comparison needs to be made of those three fiscal years, plus fiscal year 1988 of the prior year's report as illustrated below.

Fiscal Year	1988	1989	1990	1991
Total \$ (millions)	\$170	\$174	\$181	\$176
\$ Variance	—	+\$4	+\$7	—\$5
% Variance	—	+2.4%	+4.0%	—2.8%

Instructions for Preparing DA Form 4223-R—Continued

c. In this illustration the plus 4 percent variance needs to be briefly but clearly explained by a MACOM since plus or minus three percent has been exceeded.

5. Operation of Utilities—Line 45.

a. Executive Order 12003 directed all Federal activities to reduce energy consumption in facilities by 20 percent between fiscal years 1975—1985 on a British Thermal Unit (BTU) per square foot basis. About 83 percent of the Army's energy is consumed in support of facilities. The Army reduced facility energy use during this 10 year period by 22 percent.

b. New 10 year energy reductions goals have been established. In furtherance of the new goals, any dollar increase at the fiscal year total dollar requirements level (column g) must be briefly but clearly explained by a MACOM.

c. Upon preparing a consolidated report covering, e.g., fiscal years 1989, 1990, and 1991 a comparison needs to be made of those three fiscal years, plus fiscal year 1988 of the prior year's report, as illustrated below.

Fiscal Year	1988	1989	1990	1991
Total \$ (millions)	\$93	\$93	\$92	\$94
\$ Variance	—	—	—\$1	+\$2

d. In this illustration, the plus \$2 million increase needs to be briefly but clearly explained by the MACOM.

6. Minor Construction—Line 47.

a. In accordance with funding guidance, the fiscal year requirements of minor construction may not exceed 10 percent of the dollar sum of maintenance and repair of real property and minor construction (column g). It can be exceeded where Army initiatives are involved, e.g., force modernization, force structure changes, force protection, and energy conservation projects.

b. Upon preparing a consolidated report covering, e.g., fiscal years 1989, 1990, and 1991 a comparison needs to be made of those three fiscal years, as illustrated below.

Fiscal Year	1988	1990	1991
Total M&R & minor construction (million \$)	\$120	\$122	\$126
Minor construction (million \$)	\$11	\$12	\$15
% of total	9.2%	9.8%	11.9%

c. In this illustration, the 11.9 percent needs to be briefly but clearly explained by the MACOM.

UNCONSTRAINED REQUIREMENTS REPORT (\$ IN THOUSANDS)					FISCAL YEAR		APPROPRIATION/FUND		RCS & OMB APPROVAL NO. 0704-0188 EXPIRES 30 JUNE 1989					
For use of this form, see AR 420-16; the proponent agency is USACE (Dollar amounts in whole dollars.)					FISCAL YEAR		CONSTANT DOLLAR USAGE: FISCAL YEAR		COMMAND					
											FOREIGN CURRENCY RATE = \$1.00		POC AND AVN/EXT	
L I N E a	FUNCTIONAL CATEGORIES b	UNIT OF MEASUREMENT c	NUMBER OF UNITS d	ANNUAL REQUIREMENTS e	ONE-TIME REQUIREMENTS f	FY TOTAL (e + f) g	BMAR/ DMAR h	GRAND TOTAL (g + h) i	TOTAL FUNDING AVAILABLE j	UNFUNDED REQUIREMENTS k				
PART 1 - FUNCTIONAL ACCOUNTS														
1	OPERATION OF UTILITIES (.J0) Sum of 2+5+8 Thru 11 (193000.00)													
2	ELECTRICAL (.J3) (Sum of 3+4) (1930x2.21)	MWH												
3	a. PURCHASED ELECTRIC ENERGY (.J3)	MWH												
4	b. ELECTRIC GENERATING PLANTS (.J3)	MWH												
5	HEATING (.J4) (Sum of 6+7) (1930x2.22, 2.23)	MBTU												
6	a. PURCHASED STEAM AND HOT WATER (.J4)	MBTU												
7	b. HEAT IN-HOUSE GENERATED (.J4)	MBTU												
8	WATER PLANTS AND SYSTEMS (.J1) (1930x2.24)	KGAL												
9	SEWAGE AND WASTE SYSTEMS (.J2) (1930x2.25)	KGAL												
10	AIR CONDITIONING (.J5)	TON												
11	OTHER UTILITIES (.J6, 6, 7, 8) (1930x2.26)													
SIGNATURES														
CONCUR: CHIEF, UTILITIES BRANCH OR EQUIVALENT				ARMY FAMILY HOUSING WILL PROVIDE DATA WHERE AVAILABLE				APPROVE: DIRECTOR OF ENGINEERING AND HOUSING						
INSTALLATION OR COMMUNITY														
MACOM								APPROVE: MACOM ENGINEER						

UNCONSTRAINED REQUIREMENTS REPORT (Continued) (\$ IN THOUSANDS)										FISCAL YEAR		COMMAND	APPROPRIATION/FUND	
LINE	FUNCTIONAL CATEGORIES b	UNIT OF MEASURE c	NUMBER OF UNITS d	FISCAL YEAR REQUIREMENTS			TOTAL REQUIREMENTS		FUNDED & UNFUNDED REQMTS					
				ANNUAL REQUIREMENTS e	ONE-TIME REQUIREMENTS f	FY TOTAL (e + f) g	BMAR/DMAR h	GRAND TOTAL (g + h) i	TOTAL FUNDING AVAILABLE j	UNFUNDED REQUIREMENTS k				
12	MAINTENANCE AND REPAIR OF REAL PROPERTY (K0) (Sum of 13+14) (192000.00)													
13	A. UTILITIES (K1) (192400.00)													
14	B. OTHER REAL PROPERTY (Sum of 15+28 Thru 31) (K0 Less K1)													
15	BUILDING TOTAL (K2) (Sum of 15 Thru 31) (192xx1.10, 1.40, 1.50)	KSF												
16	1. TRAINING (K2)	KSF												
17	2. MAINTENANCE AND PRODUCTION (K2)	KSF												
18	3. RESEARCH, DEVELOPMENT AND TEST (K2)	KSF												
19	4. STORAGE (K2)	KSF												
20	5. HOSPITAL AND MEDICAL (K2)	KSF												
21	6. ADMINISTRATION (K2)	KSF												
22	7. BACHELOR HOUSING (K2)	KSF												
23	8. COMMUNITY (K2)	KSF												
24	9. FAMILY HOUSING DWELLINGS (K2) (Sum of 25+26)	KSF												
25	a. ROUTINE MAINTENANCE & REPAIR (1921x1.11, 1.12, 1.14, 1.50)	KSF												
26	b. MAJOR MAINTENANCE & REPAIR (1922x1.13, 1.18, 1.40)	KSF												
27	10. OTHER (K2)(19xx.1.39, 1.60, 3.00)	KSF												

UNCONSTRAINED REQUIREMENTS REPORT (Continued) (\$ IN THOUSANDS)										FISCAL YEAR	COMMAND	APPROPRIATION/FUND	
LINE	FUNCTIONAL CATEGORIES b	UNIT OF MEASURE c	NUMBER OF UNITS d	FISCAL YEAR REQUIREMENTS			TOTAL REQUIREMENTS		FUNDED & UNFUNDED REQUIREMENTS				
				ANNUAL REQUIREMENTS e	ONE-TIME REQUIREMENTS f	FY TOTAL (e + f) g	BMAR/DMAR h	GRAND TOTAL (g + h) i	TOTAL FUNDING AVAILABLE j	UNFUNDED REQUIREMENTS k			
28	LAND (Grounds) (K3) (192xx1.31)	AC											
29	PAVEMENTS (K6) (192xx1.32)	KSY.											
30	RAILROAD TRACKAGE (K4)	LF											
31	MISC. MAINTENANCE (K6) (192xx1.39)												
32	MAJOR RPMA M&R PROJECTS (Exclude line 24) Non-Add Memo Entry	NO PROJCTS											
33	MINOR CONSTRUCTION (L0) (192300.00)	NO PROJCTS											
34	ENGINEER SUPPORT (M0) (Sum of 35+41+42+44)												
35	A. SERVICES (Sum of 36 Thru 40)												
36	1. FIRE PROTECTION (M1) (1912x2.12)	NO PERS.											
37	2. REFUSE HANDLING (M2) (1912x2.11)	KCY											
38	3. PEST CONTROL (M3) (1912x2.14)	KSF											
39	4. CUSTODIAL SERVICES (M4) (1912x2.15)	KSF											
40	5. OTHER (M5) (M6) (M9 Less M9 on Line 42) (1912x2.13, 2.16, 2.17, 2.18, 2.19)												
41	B. MANAGEMENT AND ENGINEERING (M6, 7, 8) (191100.00)												
42	C. REAL ESTATE TRANSACTIONS (M9) (191500.00)												
43	LEASES ON LINE 42 (Non-Add Memo Entry).	NO LEASES											
44	D. FAMILY HOUSING FURNISHINGS (191400.00)												

UNCONSTRAINED REQUIREMENTS REPORT (Continued) (\$ IN THOUSANDS)										FISCAL YEAR		COMMAND		APPROPRIATION/FUND	
LINE	FUNCTIONAL CATEGORIES	UNIT OF MEASURE	NUMBER OF UNITS	FISCAL YEAR REQUIREMENTS			TOTAL REQUIREMENTS		FUNDED & UNFUNDED REQUIREMENTS						
				ANNUAL REQUIREMENTS	ONE-TIME REQUIREMENTS	FISCAL YEAR TOTAL (e + f)	BMAR/DMAR	GRAND TOTAL (g + h)	TOTAL FUNDING AVAILABLE	UNFUNDED REQUIREMENTS					
a	b	c	d	e	f	g	h	i	j	k					
PART II-SUMMARY															
45	OPERATION OF UTILITIES (.J0) (193000.00)														
46	MAINTENANCE AND REPAIR (.K0) (192000.00)														
47	MINOR CONSTRUCTION (.L0) (192200.00)														
48	ENGINEER SUPPORT (.M0)														
49	TOTAL REQUIREMENTS (Sum of 45 Thru 48)														
50	MANAGEABLE BMAR LEVEL (Non-Add Memo Entry)														
REMARKS															

UNCONSTRAINED REQUIREMENTS REPORT (Continued) (\$ IN THOUSANDS)					FISCAL YEAR		COMMAND		APPROPRIATION/FUND	
LINE	FUNCTIONAL CATEGORIES b	UNFUNDED REQUIREMENTS			DEFERRED BMAR/DMAR3 n	FUNCTIONAL CATEGORIES b	UNFUNDED REQUIREMENTS			DEFERRED BMAR/DMAR3 n
		RECURRING NON-BMAR/ DMAR1 i	POTENTIAL BMAR/DMAR2 m				RECURRING NON-BMAR/ DMAR1 i	POTENTIAL BMAR/DMAR2 m		
PART I - FUNCTIONAL ACCOUNTS										
12	MAINTENANCE AND REPAIR OF REAL PROPERTY (.K0) (Sum of 13-14) (192000.00)					28	LAND (Grounds) (.K3) (192xx1.31)			
13	A. UTILITIES (.K1) (192400.00)					29	PAVEMENTS (.K5) (192xx1.32)			
14	B. OTHER REAL PROPERTY (.K0 Less .K1) (Sum of 15+28 Thru 31)					30	RAILROAD TRACKAGE (.K4)			
15	BUILDING TOTAL (.K2) (Sum of 13 Thru 28) (192xx1.10, 1.40, 1.50)					31	MISC. MAINTENANCE (.K6) (192xx1.39)			
16	1. TRAINING (.K2)					32	MAJOR RPMA M&R PROJECTS (Exclude line 24) Non-Add Memo Entry			
17	2. MAINTENANCE AND PRODUCTION (.K2)					REMARKS				
18	3. RESEARCH, DEVELOPMENT AND TEST (.K2)									
19	4. STORAGE (.K2)									
20	5. HOSPITAL AND MEDICAL (.K2)									
21	6. ADMINISTRATION (.K2)									
22	7. BACHELOR HOUSING (.K2)									
23	8. COMMUNITY (.K2)									
24	9. FAMILY HOUSING DWELLINGS (.K2) (Sum of 25+26)									
25	a. ROUTINE MAINTENANCE & REPAIR (1921x1.11, 1.12, 1.14, 1.50)									
26	b. MAJOR MAINTENANCE & REPAIR (1922x1.13, 1.18, 1.40)									
27	10. OTHER (.K2) (19xx.1.39, 1.60, 3.00)									
NOTES										
UNFUNDED REQUIREMENT ITEMS IF UNFUNDED BY 30 SEPTEMBER										
1/ Never become backlog										
2/ Are backlog candidates (Unfunded FY Total, Column g)										
3/ Carry over to next Fiscal Year										

Instructions for Completing DA Form 4954-R

Part I. General Information

Item	Instructions
1. <i>DA Form 4954-R.</i>	DA Form 4954-R is a multiple use form designed for progressively preparing each of the following related components of the Direct Backlog Status Report. <ul style="list-style-type: none"> A. Quarterly Direct BMAR Obligations (part II) B. FY Direct Unfinanced BMAR (part III) C. FY Summary Analysis of Direct Backlog Changes (part IV) D. FY Direct Unfinanced AFH DMAR (part V).
2. <i>Blocks A or B.</i>	Check either block A or block B to indicate the type of component that is to be prepared. <ul style="list-style-type: none"> 1. If block A is checked, complete part II below. 2. If block B is checked, complete parts III, IV and V below.

Part II. Quarterly Direct BMAR Obligations

Notes.

1. Complete only pages 1, 2, 3, and 4.
2. Prepare a separate component report for each BMAR appropriation or fund citation, e.g., OMA, OMAR, RDTE, AIF, OPA. Whenever a MACOM subdivides an appropriation or fund citation, a separate component report is required for each such subdivision. For example, AMC subdivides OMA into OMA RPMA (PE 722894), OMA Industrial Preparedness (PE 728011), and OMA Depot Supply (PE 721111). In this instance, AMC would submit three OMA Component reports and should clearly identify each program element.
3. Show dollar amounts in thousands, e.g., \$2,400 = \$2.

A. Heading Information

Item	Instructions
1. <i>Fiscal Year.</i>	Enter the current fiscal year on pages 1, 2, 3, and 4.
2. <i>Command.</i>	Enter either the name of the installation, community, activity, or MACOM on pages 1, 2, 3, and 4.
3. <i>Appropriation or fund.</i>	Enter the applicable BMAR appropriation or fund citation on pages 1, 2, 3 and 4. See note 2 above.
4. <i>POC and Atv Ext.</i>	Enter the name and autovon extension of the person who should be called to obtain additional information on page 1.
5. <i>Foreign currency rate used.</i>	Enter the BMAR foreign currency rate used that would be equal to \$1.00 on page 1.
6. <i>Quarter ending date.</i>	Enter either 31 December, 31 March, 30 June, or 30 September on page 1.

B. Columnar Information

Column	Instructions
a. <i>Line No.</i>	Self-explanatory.
b. <i>AMS code.</i>	Definitions are contained in AR 37-100-XX.
c. <i>Facility category.</i>	Self-explanatory, except that each entry should cover both active and inactive installations.
d. <i>Construction category code.</i>	Construction category codes are contained in AR 415-28.

e. *BMAR ending 30 Sep*

Enter the dollar amounts of the prior fiscal year ending date (30 Sep) BMAR of each applicable AMS Code and Facility Category as contained in the prior year component report. The dollar amounts entered in this column as of 30 Sep will remain the same on each quarterly report of the current year. Do not include any changes that occur during the year.

Quarterly Cumulative Obligations

f. *Permanent facilities.*

Enter the direct cumulative fiscal year BMAR obligations in columns *f*, *g*, *h*, and *i*. Each quarterly component will progressively contain the cumulative BMAR fiscal year obligations, as illustrated below.

Quarter ending date	Cumulative obligations	Due at HQDA NLT
31 Dec	1 Oct-31 Dec	4 Feb
31 Mar	1 Oct-31 Mar	4 May
30 Jun	1 Oct-30 Jun	4 Aug
30 Sep	1 Oct-30 Sep	4 Nov

Notes.

1. Enter actual BMAR cumulative obligations (not BMAR estimates).
2. Separately enter in each column the cumulative direct obligations of BMAR projects. Obligation amounts will cover only those projects recorded as BMAR at the close of the prior fiscal year.
3. Column *i* totals will rarely equal column *e* amounts. Column *e* reflects baseline (or starting) dollar amounts which do not change during the fiscal year, e.g., 30 Sep 1986. Column *i* progressively contains cumulative fiscal year obligations (or reductions) in direct BMAR, e.g. 1 Oct 1986 through 30 Sep 1987.

g. *Semi-permanent facilities.*

See *f* above.

h. *Temporary facilities.*

See *f* above.

i. *Total.*

See *f* above.

C. Line Item Information

Line	Instructions
—	Line item references are self-explanatory except for the following lines.
3. <i>Electric.</i>	This line is the sum of lines 4 + 5.
8. <i>Other utility systems.</i>	This line is the sum of lines 9 through 13.
15. <i>Maintenance and production buildings.</i>	This line is the sum of lines 16 + 17.
19. <i>Storage buildings.</i>	This line is the sum of lines 20 through 22.
27. <i>Other buildings.</i>	This line is the sum of lines 28 through 34.
35. <i>Grounds.</i>	This line is the sum of lines 36 + 37.
41. <i>Parking and walks.</i>	This line is the sum of lines 42 + 43.
45. <i>Other.</i>	This line is the sum of lines 46 through 51.
54. <i>Totals.</i>	This line is the sum of lines 1-3, 6-8, 14, 15, 18, 19, 23-27, 35, 38-41, 44, 45, 52, 53.
55. <i>BMAR target.</i>	This line is for the optional use of each installation, community and MACOM.

Instructions for Completing DA Form 4954-R—Continued

Part III. FY Direct Unfinanced BMAR

Notes.

1. Complete only pages 1, 2, 3 and 4. When any appropriation or fund ending BMAR is less than \$25,000 (line 8, part IV C) submit a letter listing each applicable appropriation and fund and the total amount involved in lieu of completing pages 1, 2, 3, and 4. However, complete page 5.

2. Prepare a separate component report for each BMAR appropriation or fund citation, e.g., OMA, OMAR, RDTE, AIF, OPA. Whenever a MACOM subdivides an appropriation or fund citation, a separate component report is required for each such subdivision. For example, AMC subdivides OMA into OMA RPMA (PE 722894), OMA Industrial Preparedness (PE 728011), and OMA Depot Supply (PE 721111). In this instance, AMC would submit three OMA Component reports and should clearly identify each program element.

3. Show dollar amounts in thousands, e.g., \$545,303.24 = \$545.

A. Heading Information

Item	Instructions
1. <i>Fiscal Year.</i>	Enter the prior fiscal year on pages 1, 2, 3 and 4.
2. <i>Command.</i>	Enter either the name of the installation, community, activity, or MACOM on pages 1, 2, 3 and 4.
3. <i>Appropriation or fund.</i>	Enter the applicable BMAR appropriation or fund citation on pages 1, 2, 3 and 4. See note 2 above.
4. <i>POC and Atv Ext.</i>	Enter the name and autovon extension of the person who should be called to obtain additional information on page 1.
5. <i>Foreign currency rate used.</i>	Enter the BMAR foreign currency rate used that would be equal to \$1.00 on page 1.

B. Columnar Information

Column	Instructions
a. <i>Line No.</i>	Self-explanatory.
b. <i>AMS Code.</i>	Definitions are contained in AR 37-100-XX.
c. <i>Facility category.</i>	Self-explanatory, except that each entry should cover both active and inactive installations.
d. <i>Construction category code.</i>	Construction category codes are contained in AR 415-28.
e. <i>BMAR ending 30 Sep ____.</i>	Leave this column blank.

FY Unfinanced Requirements

- f. *Permanent facilities.* Distribute prior fiscal year unfinanced requirements in columns f, g, h, and i.

Notes.

1. The sum of column f + g + h should equal column i on each line and in total.
2. The sum total of column i (line 54) should be equal to the BMAR Ending Backlog—30 Sep of line 8 of component C. FY Summary Analysis of Direct Backlog changes (page 5 of DA Form 4954-R).

- g. *Semi-permanent facilities.* See f above.
h. *Temporary facilities.* See f above.
i. *Total.* See f above.

C. Line Item Information

Note. See part II C for line item information instructions.

Part IV. FY Summary Analysis of Direct Backlog Changes

Notes.

1. Complete only page 5.
2. This component covers active and inactive units.
3. Prepare a separate component report for each BMAR appropriation or fund citation, e.g., OMA, OMAR, RDTE, AIF, OPA. Whenever a MACOM subdivides an appropriation or fund citation, a separate component report is required for each such subdivision. For example, AMC subdivides OMA into OMA RPMA (PE 722894), OMA Industrial Preparedness (PE 728011), and OMA Depot Supply (PE 721111). In this instance, AMC would submit three OMA Component reports and should clearly identify each program element.

A. Heading Information

Item	Instructions
1. <i>Appropriation or fund.</i>	Enter the applicable BMAR or AFH DMAR fund citation on page 5. See note 3 above.
2. <i>Fiscal Year.</i>	Enter the prior fiscal year on page 5.
3. <i>Command.</i>	Enter either the name of the installation, community, activity, or MACOM on page 5.
4. <i>Foreign Currency Rate Used.</i>	Enter the BMAR or AFH DMAR foreign currency rate used that would be equal to \$1.00 on page 5.
5. <i>POC and Atv Ext.</i>	Enter the name and autovon extension of the person who should be called to obtain additional information on page 5.

B. Columnar Information

Column	Instructions
a. <i>Line No.</i>	Self-explanatory.
b. <i>Description.</i>	Self-explanatory.
c. <i>Total amount.</i>	Enter all dollar amounts in thousands. For example, \$545,303.24 = \$545. Note. The BMAR total amount shown on line 8 should equal the BMAR sum total of column i component B. FY Unfinanced Requirements (line 54, page 4, DA Form 4954-R).

C. Line Item Information

Line	Instructions
1. <i>Beginning Backlog—1 October.</i>	Enter the same BMAR or AFH DMAR dollar amount shown on line 8 of the prior fiscal year report.
2. <i>Backlog Changes—1 Oct.—30 Sep.</i>	Leave this line blank.
3. <i>a. Projects Financed (—).</i>	Enter the total dollar amount of all projects included on line 1 which were obligated during the fiscal year, regardless of whether the projects have, or have not, been completed. The total amount obligated against these projects should be included. Notes. 1. Projects financed represent a deduction from the line 1 total amount. 2. Do not include price variances from recorded estimates, as these are to be included on line 5.
4. <i>Projects dropped for other reasons (—).</i>	Enter the total dollar amount of all projects included on line 1 which are no longer considered to be BMAR or AFH DMAR and which have been deleted, or are to be deleted, from BMAR or AFH DMAR lists. A general explanation is required in remarks.

Instructions for Completing DA Form 4954-R—Continued

Notes.

1. Projects dropped for other reasons represent a deduction from the line 1 total amount.
2. BMAR projects dropped could include:
 - a. Projects non-validated during routine inspections.
 - b. Facilities mission changes.
 - c. Projects funded by other than OMA resources (i.e., MCA, occupant changes, etc.)
 - d. Projects rescheduled to a subsequent fiscal year.

3. AFH DMAR projects dropped could include:
 - a. Projects non-validated during routine inspections.
 - b. Projects no longer required because the building will be demolished, inactivated, or diverted.
 - c. Projects accomplished by the maintenance, repair, and improvement program.
 - d. Projects rescheduled to a subsequent fiscal year.

5. *c. Cost changes in Line 1 Backlog Projects remaining in backlog as of 30 Sep.* Enter the total cost variances of projects financed (line 3) and the repricing of BMAR and AFH DMAR projects which remain unfinanced as of 30 Sep and will continue as a valid requirement into a subsequent fiscal year.

Note. Cost changes could represent either a deduction from, or addition to, line 1.

6. *d. Total amount.* Enter the sum of lines 3, 4 and 5.

7. *Projects added to Backlog during Fiscal year.* Enter the dollar amount of projects added to the BMAR and AFH DMAR listing—new projects which were included in the annual work plan for accomplishment during the fiscal year—that remained unfinanced as of 30 Sep and which satisfied the established criteria for reporting as BMAR and AFH DMAR. Projects added must be valid (that is, included in an approved work plan) but need not have been validated by higher headquarters. A general explanation is required in remarks.

Note. Projects added to backlog during fiscal year represent an addition to the line 1 total amount.

8. *Ending Backlog 30 Sep.* Enter the sum of line 1 + or - 6 + 7.

Notes.

1. The total amount for BMAR only will be displayed by facility category shown on pages 1, 2, 3 and 4 of component B. FY Unfinanced Requirements. Whenever any appropriation or fund does not exceed \$25,000, see note 1, part III.

2. The total amount for AFH DMAR should equal the total funding required shown in column e., line 4 of component D. FY Direct Unfinanced AFH DMAR.

3. There must be on file adequate supporting documents which identify the required maintenance and repair work and cost estimates.

4. Include the total dollar amount validated by the next higher headquarters in the remarks space.

Enter the dollar amount of BMAR temporary facilities included on line 8.

9. *Amount of BMAR temporary facilities.*

Notes.

1. This line does not apply to AFH DMAR.

2. This line is a non-add memo entry.

10. *Backlog amount (Line 8) programmed for accomplishment during:*

Leave this line blank.

11. *a. Budget year.* Enter the dollar amount of BMAR and AFH DMAR projects which can be expected to be accomplished during the budget year under current management guidance.

12. *b. Budget Year + 1.* Enter the dollar amount of BMAR and AFH DMAR projects which can be expected to be accomplished during budget year + 1 under current management guidance.

13. *c. Total Amount.* Enter the sum of lines 11 + 12.

Part V. FY Direct Unfinanced AFH DMAR

A. Columnar Information

Column	Instructions
<i>a. Line No.</i>	Self-explanatory.
<i>b. AMS code.</i>	Definitions are contained in AR 37-100-XX.
<i>c. Description.</i>	Self-explanatory.
<i>d. Number of dwelling units.</i>	Enter the number of dwelling units.

Notes.

1. This should include all dwelling units, except as noted in 2 below, and should not be limited to dwelling units identified as requiring maintenance and repair.

2. Exclude from the overall total dwelling units diverted to non-family housing.

- e. *Funding required.* Enter the total funding required in thousands of dollars. For example, \$210,301 = \$210.

Note. Total funding required should equal line 8 of component C. FY Summary Analysis of Direct Backlog changes.

B. Line Item Information

The line items are self-explanatory.

DIRECT BACKLOG STATUS REPORT										RCS & OMB APPROVAL NO. 0704-0188 EXPIRES 30 JUNE 1989	
For use of this form, see AR 420-16; the proponent agency is USACE (Dollar amounts in whole dollars.)											
FISCAL YEAR	COMMAND	APPROPRIATION/FUND		ENTER X IN: 1. Either Block "A" and enter Quarter Ending Date. 2. or Block "B"	A QUARTERLY DIRECT BMAR OBLIGATIONS (\$ in Thousands) QUARTER ENDING DATE:	B-FY UNFINANCED REQUIREMENTS			TOTAL (f + g + h)		
		POC AND ATV/EXT	FOREIGN CURRENCY RATE = \$1.00			CONSTRUCTION CATEGORY CODE d	PERMANENT FACILITIES f	SEMI- PERMANENT FACILITIES g		TEMPORARY FACILITIES h	
FACILITY CATEGORY c				BMAR ENDING 30 Sep _____ ("A" Only) e	A-QUARTERLY CUMULATIVE OBLIGATIONS						
					B-FY UNFINANCED REQUIREMENTS						
L 1 N E	AMS CODE a										
1	K1	WATER SYSTEMS (17 Utility Systems)		811-813, 821-824, 826, 827, 831, 832, 841-845, 880, 890							
2	K1	SEWERAGE (17 Utility Systems)		See Line 1.							
3	K1	ELECTRIC (Sum of Line 4 + 5)									
4	K1	(02 COMMUNICATION/AVIATION FACILITIES)		131-134, 136, 138							
5	K1	(17 UTILITY SYSTEMS)		See Line 1.							
6	K1	BOILER/HEAT (17 Utility Systems)		See Line 1.							
7	K1	AIR CONDITIONING (17 Utility Systems)		See Line 1.							
8	K1	OTHER UTILITY SYSTEMS (Sum of Lines 9-13)									
9	K1	(01 OPERATIONAL SYSTEMS)		123, 126, 137, 141-143, 148, 149							
10	K1	(03 AVIATION OPERATIONAL SYSTEMS)		111-113, 116, 121							
11	K1	(04 WATERFRONT AND HARBOR FACILITIES)		122, 151-156, 159, 161-165, 169							
12	K1	(09 POL SUPPLY/STORAGE)		124, 125, 411, 412							
13	K1	(17 UTILITY SYSTEMS)		See Line 1.							
14	K2	TRAINING BUILDINGS (05 TRAINING FACILITIES)		171, 179							
15	K2	MAINTENANCE AND PRODUCTION BUILDINGS (Sum of Line 16 + 17)									

DIRECT BACKLOG STATUS REPORT (Continued)					FISCAL YEAR		COMMAND		APPROPRIATION/FUND		
(\$ IN THOUSANDS)											
LINE	AMS CODE	FACILITY CATEGORY c	CONSTRUCTION CATEGORY CODE d	BMAR ENDING 30 Sep ("A" Only) e	A-QUARTERLY CUMULATIVE OBLIGATIONS				TOTAL (f + g + h) i		
					B-FY UNFINANCED REQUIREMENTS						
					PERMANENT FACILITIES f	SEMI- PERMANENT FACILITIES g	TEMPORARY FACILITIES h				
16	.K2	(06 MAINTENANCE FACILITIES)	211-219								
17	.K2	(07 PRODUCTION FACILITIES)	221-229								
18	.K2	ROTE BUILDINGS (08 ROTE FACILITIES)	310-321, 390								
19	.K2	STORAGE BUILDINGS (Sum of Lines 20-22)									
20	.K2	(09 POL SUPPLY/STORAGE)	124, 125, 411, 412								
21	.K2	(10 AMMO SUPPLY/STORAGE)	421-425								
22	.K2	(11 OTHER SUPPLY/STORAGE)	431, 432, 441, 442, 451, 452								
23	.K2	HOSPITAL BUILDINGS (12 Hospital/Medical Facilities)	510, 530, 540, 550								
24	.K2	ADMINISTRATIVE BUILDINGS (13 Administrative Facilities)	610, 620, 630								
25	.K2	BACHELOR HOUSING (15 Unaccompanied Personnel Housing/Dining Facilities)	721-725								
26	.K2	COMMUNITY BUILDINGS (16 Community Facilities)	730, 740, 750, 760								
27	.K2	OTHER BUILDINGS (Sum of Lines 28-34)									
28	.K2	(01 OPERATIONAL FACILITIES)	123, 126, 137, 141-143, 148, 149								
29	.K2	(02 COMMUNICATION/ AVIATION FACILITIES)	131-134, 136, 138								
30	.K2	(03 AVIATION OPERATIONAL FACILITIES)	111-113, 116, 121								
31	.K2	(11 OTHER SUPPLY/STORAGE)	See Line 22								
32	.K2	(14 FAMILY HOUSING FACILITIES)	711-714								
33	.K2	(17 UTILITY SYSTEMS)	811-813, 821-824, 826, 827, 831, 832, 841-845, 880, 890								

DIRECT BACKLOG STATUS REPORT (Continued)					FISCAL YEAR		COMMAND		APPROPRIATION/FUND	
(\$ IN THOUSANDS)										
LINE	AMS CODE	FACILITY CATEGORY	CONSTRUCTION CATEGORY CODE	BMAR ENDING 30 Sep ("A" Only)	A-QUARTERLY CUMULATIVE OBLIGATIONS				TOTAL (f + g + h)	
					PERMANENT FACILITIES	SEMI-PERMANENT FACILITIES	TEMPORARY FACILITIES			
a	b	c	d	e	f	g	h	i		
34	.K2	(19 REAL ESTATE)	911-914, 921-923							
35	.K3	GROUND (Sum of Lines 36 + 37)								
36	.K3	(05 TRAINING FACILITIES)	171, 179							
37	.K3	(18 ROADS AND GROUNDS)	851, 852, 860, 871, 872, 931-934, 939							
38	.K4	RAILROADS (18 Roads and Grounds)	See Line 37							
39	.K5	ROADS (18 Roads and Grounds)	See Line 37							
40	.K5	AIR FIELDS (03 Aviation Operational Facilities)	111-113, 116, 121							
41	.K5	PARKING AND WALKS (Sum of Lines 42 + 43)								
42	.K5	(11 OTHER SUPPLY/STORAGE)	431, 432, 441, 442, 451, 452							
43	.K5	(18 ROADS AND GROUNDS)	See Line 37							
44	.K5	BRIDGES (18 Roads and Grounds)	See Line 37							
45	.K6	OTHER (Sum of Lines 46-51)								
46	.K6	(01 OPERATIONAL FACILITIES)	123, 126, 137, 141 143, 148, 149							
47	.K6	(02 COMMUNICATION/AVIATION FACILITIES)	132-134, 136, 138							
48	.K6	(03 AVIATION OPERATIONAL FACILITIES)	See Line 40							
49	.K6	(05 TRAINING FACILITIES)	See Line 36							
50	.K6	(08 ROTE FACILITIES)	310 321, 390							
51	.K6	(18 ROADS AND GROUNDS)	See Line 37							

DIRECT BACKLOG STATUS REPORT (\$ IN THOUSANDS)				APPROPRIATION/FUND ²		COMMAND		RCS: ENG-288	
FOR USE OF THIS FORM - SEE AR 420-16. The Proponent Agency is The Office of the Chief of Engineers (See Reverse for Instructions. Submit in Duplicate)				FISCAL YEAR		POC		FOREIGN CURRENT RATE	
						ATV/EXT		= \$1.00	
C. FY SUMMARY ANALYSIS OF DIRECT BACKLOG CHANGES ¹				D. FY DIRECT UNFINANCED AFH DMAR ¹					
LINE	DESCRIPTION	TOTAL AMOUNT	AMS CODE	DESCRIPTION	NUMBER DWELLING UNITS ³	FUNDING REQUIRED			
a	b	c	b	c	d	e			
1	BEGINNING BACKLOG - 1 OCTOBER		1920 xx100	MAINTENANCE AND REPAIR OF DWELLING UNITS					
2	BACK LOG CHANGES - 1 OCTOBER - 30 SEPTEMBER		1920 xx120	MAINTENANCE AND REPAIR OF EXTERIOR UTILITIES					
3	a. PROJECTS FINANCED (-)		1920 xx130	MAINTENANCE AND REPAIR OF OTHER REAL PROPERTY					
4	b. PROJECTS DROPPED FOR OTHER REASONS (-) (Explain in Remarks)			TOTALS	4				
5	c. COST CHANGES IN LINE 1 BACKLOG PROJECTS REMAINING IN BACKLOG AS OF 30 SEP (+ or -)			REMARKS					
6	d. TOTAL AMOUNT (Lines 3, 4, 5)								
7	PROJECTS ADDED TO BACKLOG DURING FISCAL YEAR (+) (Explain in Remarks)								
8	ENDING BACKLOG - 30 SEPTEMBER (Sum of 1 + or - 6 + 7)								
9	AMOUNT OF BMAR TEMPORARY FACILITIES (Projects in Line 8 (Non-Add Memo Entry))								
10	BACKLOG AMOUNT (Line 8) PROGRAMMED FOR ACCOMPLISHMENT DURING:								
11	a. BUDGET YEAR								
12	b. BUDGET YEAR + 1								
13	c. TOTAL AMOUNT (Sum of 11 + 12)								
NOTES:									
1/ - INCLUDES ACTIVE AND INACTIVE.									
2/ - ENTER APPLICABLE BMAR OR AFH DMAR CITATION, E.G. - OMA, OMA, RDTE, AIF, OPA, AFH DMAR.									
3/ - DO NOT INCLUDE UNITS DIVERTED TO NON-FAMILY HOUSING.									
4/ - TOTAL FUNDING REQUIRED SHOULD EQUAL LINE 8 OF C - FY SUMMARY ANALYSIS OF DIRECT BACKLOG CHANGES.									

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